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Boredom Proneness and Character Strengths Related to Academic Achievement in Adolescence

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BOREDOM PRONENESS AND CHARACTER STRENGTHS RELATED TO ACADEMIC ACHIEVEMENT IN ADOLESCENCE

Dissertation

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by

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Dedication

To my loving husband, Eugene John Iannaccone, for dreaming with me, holding me up, and helping me keep my eyes on the real prize.

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This project was possible because of the unwavering faith and support I received from my Dissertation Committee. Each member ensured my success and inspired me to grow as an instructional leader. I extend heartfelt thanks to my Chair, Dr. Andrew Courtner, for sharpening my analytical skills, setting the perfect pace, and reassuring me that this valuable goal was within my reach. To Dr. Cherie Gaines, I offer warm thanks for asking me focused questions, providing meaningful feedback, and having an incredible eye for details. To Dr. Shannon Collins, I am forever grateful for the gentle lessons in the art of simplifying, and for the dog-sledding metaphor that prepared me well for this arduous and exhilarating adventure.

Abstract

Susceptibility to boredom can interfere with students' ability to achieve their academic potential, with enduring negative consequences. In the present study, the researcher investigated differences in boredom proneness and character strengths in adolescent high school students and the ability of boredom proneness scores and character strengths to predict academic achievement. Results indicated that 9 of 10 students were moderately or highly prone to boredom. Students' whose top character strength was humility were more highly prone to boredom than students' whose top-ranked character strengths were bravery, prudence, or curiosity. From boredom proneness and character strengths data the researcher concluded that neither were predictive of achievement as measured by self-reported GPA. Among the relevant challenges for educational leaders remains responding to boredom proneness, which can negatively impact high school students' ability to acquire the knowledge and skills needed for an effective transition to postsecondary education and career.

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Chapter I: Introduction

Historically, classrooms have been emotional places, and research has confirmed that students experience a broad range of feelings in academic settings (Pekrun, Muis, Frenzel, & Goetz, 2018). When considering why a student may not be doing well in school, educational leaders have paid attention to students' emotional experiences (Pekrun & Stephens, 2009). Researchers have shown boredom to be among the most pervasive and detrimental influences on student achievement (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Visible Learning Plus, 2018). According to a 2015 Gallup Student Poll, engagement levels showed a consistent decrease as students got older, bottoming out in 11th grade with as many as 68% of students reporting chronic disengagement (Brenneman, 2016). Researchers have also shown that emotions affect students' motivation and engagement with learning; boredom within the classroom or while studying has negatively affected students' attention and use of learning strategies (Pekrun et al., 2018), and performance outcomes (Tze, Daniels, & Klassen, 2016). Those who are routinely prone to boredom are at risk of additional problems. High-boredom proneness has been associated with lack of self-awareness (Seib & Vodanovich, 1998), frequent feelings of anger and aggression, including difficulty controlling anger (Dahlen, Martin, Regan, & Kuhlman, 2004; Rupp & Vodanovich, 1997), psychopathologies including anxiety (LePera, 2011), depression (Farmer & Sundberg, 1986; Mercer-Lynn, Bar, & Eastwood, 2014; Vodanovich, 2003), and neuroticism (Mercer-Lynn, Hunter, & Eastwood, 2013).

Although teachers have attempted to address student boredom by reducing environmental triggers (Wang et al., 2017), they have not been able to totally prevent it

(Pekrun et al., 2010); some students have experienced the negative emotion even when in high-quality classrooms (Daschmann, Goetz, & Stupnisky, 2011). Rather than concentrating on situational or temporary conditions of boredom within the classroom, Martin, Sadlo, and Stew (2006) contended that teachers may be more effective focusing on the internal characteristics of their students. By shifting attention to the positive aspects of students, Alzina and Paniello (2017) suggested that educators may be able to contribute to the development of emotional competencies or even prevent the incidence of the maladaptive emotion of boredom, while simultaneously facilitating uplifting experiences within the school environment to enhance students' overall wellbeing. It occurred to this researcher that the principles of positive psychology can be a means of providing students an emotional education along with an academic one.

Positive psychology was defined by Seligman, Steen, Park, and Peterson (2005) as the study of positive emotions, positive character traits, positive institutions, the interactions among an individual's positive traits, and areas of weakness or psychopathology. Researchers who adopted the perspective of positive psychology have sought to understand the factors that facilitated optimal functioning as much as those that prevented it (Linley, Harrington, & Wood, 2006). Aligned with new paradigms of 21st century schooling to grow the *whole student* through social, emotional, moral, and intellectual development (Waters, 2011), positive psychology emphasized positive emotions and personal character strengths (Seligman & Csikszentmihalyi, 2000). When educators focused on the personal competencies of students, educators increased students' motivation to learn and commitment to schooling (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Recognizing and cultivating character strengths

has decreased negative emotions (Seligman et al., 2005) such as academic boredom and served as a resource for the development of coping skills (Gillham et al., 2011) to reduce negative resulting outcomes (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995). Implementation of positive psychology interventions in schools has added to, rather than replaced, standard approaches aimed at reducing negative factors (Waters, 2011). Typical ways of alleviating boredom have included switching activities and regulating the cognitive demand (Westgate & Wilson, 2018) or employing cognitive and behavioral strategies (Nett, 2010). Positive psychology interventions have improved students' emotional and academic functioning (Furlong, Gilman, & Huebner, 2009).

Each student brings a unique blend of strengths to school, both academic and non-academic. Practitioners of positive psychology have advocated the use of one's non-academic *signature* strengths, or top five character strengths, to achieve higher levels of wellbeing and they proposed that people can learn to use their strengths as a vehicle for personal, academic, and professional success (Peterson & Seligman, 2004). From regular use of one's character strengths, individuals could experience improvements in wellbeing and associated positive emotions can emerge (Quinlan, Swain, & Vella-Broderick, 2012). Positive emotions have formed upward spirals (Fredrickson, 2011) and created conditions for decreased maladaptive behaviors, healthy development, and optimal learning in the classroom (Martin, 2017).

Researchers have revealed positive associations between academic achievement and character strengths of curiosity, temperance, perseverance, fairness, gratitude, honesty, hope, and perspective (Park & Peterson, 2008). Duckworth and Seligman (2005) found that self-discipline scores were better predictors of student grade point

average than IQ scores. Lounsbury et al. (2009) reported that the strengths which predicted GPA in college students were perseverance, self-regulation, prudence, judgment, and love of learning. Wagner and Ruch (2015) found correlations between positive classroom behaviors and character strengths of perseverance, self-regulation, prudence, social intelligence, and hope.

Viewed collectively, there was evidence of connections between character strengths and academic achievement; thus, the relationship of students' top character strengths to boredom proneness, which negatively affects academic performance, merited examination. In the present quantitative investigation, the researcher used a non-experimental, correlational design to explore the associations between the variables of boredom proneness, character strengths, and academic achievement. According to Costello and Stone (2012) educational leaders could use positive psychology principles of character strengths to compare patterns of intrinsic characters assets in students who are and are not prone to boredom, and if patterns existed, this information could help close this research gap and lead to targeted strength-based interventions to increase academic success and mitigate academic boredom.

Statement of the Problem

Academic boredom has been a universal emotion experienced by students in various educational contexts (Cui, Yao, & Zhang, 2017; Tze, Daniels, & Klassen, 2016; Tze, Klassen, & Daniels, 2014) across age groups, ethnicity, educational needs, and learning disabilities (Preckel, Goetz, & Frenzel, 2010). Researchers have indicated that boredom linked to achievement-related activities was among the most frequently experienced affective states occurring in classrooms (Macklem, 2015; Pekrun, Goetz,

Titz, & Perry 2002; Pekrun, Hall, Goetz, & Perry, 2014) with negative effects on academic achievement (Frenzel, Pekrun, & Goetz, 2007; Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Tze et al., 2016; Vogel-Walcutt, Fiorella, Carper, & Schatz, 2012). Hattie (2012) systematically assessed over 52,637 previous research studies of the attributes of schooling that affect student achievement (p. 13). The organization Visible Learning Plus (2018) updated Hattie's conclusions; of the 252 factors that influenced student achievement, boredom ranked as the third most detrimental.

Bored students cannot reach their cognitive potential; they had higher rates of school absenteeism and drop-out (Reschly & Christenson, 2006), and they earned lower grades than their non-bored peers (Castens & Overbey, 2009; Daniels et al., 2009; Pekrun et al., 2010; Tze, Daniels, Klassen, & Li, 2013). Bored students participated less in class, interacted less positively with teachers, spent less time on homework, and viewed the school environment as less emotionally supportive (Reschly & Christenson, 2006). It is the view of this researcher that the study of boredom proneness was particularly relevant for older adolescents who had been in school many consecutive years by the time they entered high school. To satisfy graduation requirements and prepare for the transition to postsecondary education and careers students may have had to take classes that were not directly applicable to chosen career fields of study. Boredom in adolescence can have negative consequences that impact students' long-term future economic success. Although teachers have tried to reduce boredom by providing choice, advocating the value of specific content, and creating innovative lessons (Wang et al., 2017), some students have still shown low interest (Gerstner & Bogner, 2017). Because teachers' attempts to alleviate boredom by manipulating the learning environment alone have been

insufficient, Nett, Goetz, and Daniels (2010) suggested that it was beneficial for researchers, educational leaders, and teachers to explore alternative strategies including dispositional features of the person (Farmer & Sundberg, 1986) to help students counteract the negative emotional experience. In other words, instead of concentrating on conditions of state boredom, a more illuminating approach to understanding boredom was to investigate the personal traits or qualities of individuals who were susceptible to experiencing boredom (Nett, Goetz, & Daniels, 2010).

An uncharted approach to understanding academic boredom has been the investigation of character strengths profiles of students who are prone to boredom. Emerging research using the conceptual framework of positive psychology presented a compelling case for strengths-based practices with youth as the strategy indicates benefits related to achievement and engagement (Linkins, Niemiec, Gillham, & Mayerson, 2015) and, by extension, potential mitigation of academic boredom. Hunter and Csikszentmihalyi (2003) found that bored students were lower in optimism the character strength of hope than their interested peers. Daniels et al. (2009), however, found that hopefulness had no effect on boredom. Sulea, Van Beek, Sarbescu, Virga, and Schaufeli (2015) concluded that boredom was positively related to neuroticism, which may entail high emotionality. Hunter et al. (2016) found that boredom proneness was positively associated with emotionality and negatively associated with personality traits of honesty-humility, creativity, and curiosity. Kashdan, Rose, and Fincham (2004) also found that boredom proneness was negatively correlated with curiosity, and Culp (2006) found that boredom proneness was negatively related to honesty-humility, emotionality, and conscientiousness. With these exceptions, there has been no empirical investigation of

the collective set of character strengths of boredom prone students. Thus, an inquiry into the association between character strengths and boredom warranted attention. The purpose of the present quantitative study was to investigate the relationship between boredom proneness levels as measured by the Short Boredom Proneness Scale (SBPS) (Struk, Carriere, Cheyne, & Dankert, 2017) and the top signature strength (Peterson & Seligman, 2004) or most prominent character strength as measured by the Values In Action Youth-96 (VIA Youth-96; Park & Peterson, 2006) of high school students and to determine if the data predicted academic performance as represented by their self-reported grade point average (GPA).

Research Questions

Historically, academic boredom has been a common emotion that negatively affects students' performance, and there has been a limited examination of its connection to the individual character strengths of students who are prone to experiencing boredom. Investigating relationships between students' propensity for boredom and patterns in their most prominent character strength may assist researchers and educators with development of novel, strength-based instructional approaches to address the prevalent condition of academic boredom in students. To guide the present inquiry, the researcher used the following questions.

Research question 1. Based on data from the Short Boredom Proneness Scale and the Values in Action Youth-96 survey, what was the difference, if any, in boredom proneness levels and top signature strength for students in grades 9-12 from two high schools in a rural southeastern school district?

Research question 2. Based on data from the Short Boredom Proneness Scale and the Values in Action Youth-96 survey, how, if at all, did scores from students in grades 9-12 from two high schools in a rural southeastern school district vary by grade level, gender, and educational disability classification?

Research question 3. Based on data from the Short Boredom Proneness Scale and the Values in Action Youth-96 survey, to what extent did boredom proneness levels and top signature character strength predict grade point average (GPA) for students in grades 9-12 from two high schools in a rural southeastern school district?

Theoretical Framework

Numerous theories of boredom have evolved over time, and definitions of boredom have accordingly varied. Eastwood, Frischen, Fenske, and Smilek (2012) described the evolution of the thinking about boredom beginning with work by Lipps about psychodynamic theory and stated that boredom was a state of longing for activity while being unaware of what was desired and looking to the world to provide a solution. Eastwood et al. (2012) referenced earlier work by Maddi and explained that from existential theory, boredom was an aversive experience of inaction, hollowness, and being unable to execute one's will or find meaning in life. Eastwood et al. (2012) also referred to prior conclusions from Seligman and Csikszentmihalyi (2000), which held that according to arousal theory, boredom was an aversive state that occurred when one could not achieve an ideal level of stimulation through interaction with the environment. Cognitive theory emphasized that the environment lacked satisfying activities and added that bored individuals had poor concentration abilities and must control their attention with effort (Todman, 2003). About boredom in academic settings including being in

class, while studying, or while testing, Pekrun (2006) developed a control-value theory which posited that a student may experience boredom during an academic-related activity when there was a perceived lack of value in that activity. According to Pekrun (2006), boredom occurred if the demands of a task were insufficiently challenging or if the demands of an activity exceeded personal capabilities and were unattainable (Pekrun, Frenzel, Goetz, & Perry, 2007; Pekrun & Perry, 2014). Collectively these theories confirmed that boredom was multidimensional and presented as a problem of cognition, motivation, engagement, or attention. Eastwood et al. (2012) described that bored persons felt stuck in an unsatisfying situation, could not sustain the attention needed to meaningfully engage in a task, and attributed an external environment as a cause of this negative feeling.

In secondary education settings, Nett, Goetz, and Daniels (2011) concluded that boredom was not always avoidable because students must follow prescribed educational curricula to graduate and may not perceive the relevance of their courses to future careers. Since students have diverse interests and perceptions of instruction, Nett et al. (2010) reported that it was not realistic to expect to consistently prevent students from experiencing boredom through specific teaching methods or coping strategies**.** For educational leaders to pragmatically address academic boredom, especially in those for whom boredom is chronic, many have reported that it may be beneficial to view boredom as generated not only by environmental influences but by dispositional personality factors as well (Daschmann et al., 2011; Farmer & Sundberg, 1986; Macklem, 2015; Vodanovich, 2003). Rather than employ a pathogenic approach of focusing on boredom as a character flaw, deficit, or type of personal malfunctioning, the present investigator

adopted a salutogenic schema (Seligman et al., 2009) to understanding boredom proneness in students. The researcher examined the relationship of academic boredom to the positive aspects of students and subsequent implications for fortifying emotional and academic functioning.

The theoretical framework that guided the present investigation stems from the science of positive psychology, which Seligman and Csikszentmihalyi (2000) defined as the study of positive human functioning, flourishing, and living a fulfilling life. According to Seligman et al. (2005) and Schutte and Malouf (2018), positive psychology was an umbrella term that involved studying positive emotions and positive aspects of humans such as their psychological strengths. Joseph and Lindley (2004) explained that the study of thriving in life traced back to Jung's concept of individuation, which encouraged people becoming all that they can be. Joseph and Lindley (2004) further expounded on the evolution of the understanding of boredom and reported that Allport previously evolved this theme with theory on personality traits of the mature individual, as did Jahoda's influential thinking about what constitutes mental health. The humanistic psychology movement, according to Joseph and Lindley (2004), emphasized the inherent potential of human beings with Rogers' concepts of the fully functioning person and Maslow's concept of self-actualization. Peterson and Park (2003) offered a basic assumption of positive psychology; human goodness and excellence were as authentic as disorder and distress and, therefore, deserve equal attention.

The Values in Action (VIA) classification, developed by Peterson and Seligman (2004), embodied positive psychology's model of character strengths. This classification was a descriptive model of personality based on personal strengths which are understood

to be universal, measurable, and teachable positive traits, and it organized 24 character strengths under six virtue classes: Wisdom and Knowledge (curiosity, love of learning, judgment, creativity, perspective); Courage (bravery, industry, integrity, zest); Humanity (love, kindness, social intelligence); Justice (citizenship, fairness, leadership); Temperance (forgiveness, humility, prudence, self-control); and Transcendence (appreciation of beauty, gratitude, hope, humor, spirituality) (Toner, Haslam, Robinson, & Williams, 2012). This comprehensive list of virtues and strengths served as the guiding model for the present investigation of academic boredom. Maddux, Snyder, and Lopez (2004) stated that positive psychological interventions emphasized the enhancement of people's assets in addition to the amelioration of their deficiencies, suggesting that "strengthening the strengths will weaken the weaknesses" **(**p. 332). According to Seligman and Csikszentmihalyi (2000), the development of skills related to human strengths has acted as a barrier to psychological disorders and, thus, may be effective in reducing academic boredom for students.

Research results have shown the relationship between 24 personal character strengths and life satisfaction, psychological wellbeing, and happiness (Alzina & Paniello, 2017). FitzSimons (2013) concluded that individuals who were not only conscious of their strengths profile but also used their strengths daily were happier, higher-achieving, and more satisfied with their lives. Park, Peterson, and Seligman (2004b) confirmed that students could expect to encounter some challenges in school, such as boredom in class or while studying, but the degree to which students had strengths of character indicated their propensity to experience success in the face of difficulties. Park and Peterson (2008) stated that strengths-based approaches in education

may not only prevent or reduce immediate problems but also help people overcome challenges and enjoy a fulfilling life. By applying the principles of positive psychology to compare the character strengths of bored and non-bored students, educators may gain added information about boredom to subsequently alleviate it and to promote optimal academic and personal functioning.

Significance of the Project

Schools have faced a variety of challenges in educating students, and among these is the occurrence of the pervasive and detrimental negative emotion of academic boredom (Frenzel, Pekrun, & Goetz, 2007; Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Tze, et al., 2016; Vogel-Walcutt, Fiorella, Carper, & Schatz, 2012). Researchers have determined that if susceptibility to boredom in educational settings goes unchecked, it can interfere with students' ability to achieve their academic potential, with enduring negative consequences (LePera, 2011; Nett et al., 2010; Pekrun et al., 2010). In the present study, the researcher maintained that boredom was especially germane to secondary students, who must satisfactorily meet rigorous course expectations designed to equip them with the knowledge, abilities, and habits that will help them effectively transition to postsecondary education and a successful career.

While it is known from previous research that boredom interferes with school performance and achievement (Daniels et al., 2015), strategies for reducing it have not had significant success in the school setting, as evidenced by boredom being one of the top three most adverse influences affecting students (Visible Learning Plus, 2018). The present investigation approached the problem of student academic boredom in a novel way. Rather than focusing on environmental factors or viewing boredom as a personal

character flaw or cognitive deficit, the researcher viewed boredom through the lens of positive psychology. Furlong et al. (2009) cautioned that confronting boredom directly may lead to frustration and defensiveness and students may quit trying; however, if discussions and interventions started with the strengths of students—things at which they are good at doing—rapport could be built and motivation increased.

To date, there was a dearth of research connecting academic boredom and individual characteristics that aligned with the VIA character strengths. The only the character strengths connected with boredom thus far have been the following: honesty (Culp, 2006), honesty-humility (Hunter et al., 2016), hope (Hunter & Csikszentmihalyi, 2003; Daniels et al., 2009), creativity (Hunter et al., 2016) and curiosity (Hunter et al., 2016; Kashdan et al., 2004). Furthermore, there was no empirical inquiry that compared the top strength from the collective signature strengths profiles of boredom prone students, and the present study added this valuable perspective to extant literature. Currently, it was unknown how boredom proneness related to students' top internal character strength, and by examining this relationship, the researcher set out to discern patterns in the predominant strength of students who were regularly bored and compare them to those who were not prone to boredom. If associations existed, then educators could teach bored students how to develop the strengths that are common to non-bored students to decrease boredom and maximize personal and cognitive competencies.

According to Park (2009), the building and enhancing of character strengths reduced the possibility of negative outcomes, and they were important indicators of healthy development and thriving. The researcher's aim in this investigation was to explore whether Peterson and Seligman's (2004) character strengths model could shed

light on proneness to boredom in a sample of secondary students, thus providing empirical support for the operational application of signature character strengths to reduce academic boredom. It is imperative for educational leaders to create interventions to mitigate academic boredom, while simultaneously fostering an emotionally uplifting learning environment, conducive to personal growth and academic success.

Description of the Terms

Academic boredom. Academic boredom is a complex and largely negative, achievement-related emotion (Sharp, Hemmings, Kay, Murphy, & Elliott, 2017) characterized by lack of stimulation and low physiological arousal (Pekrun, 2006; Tze et al., 2013) or high arousal (Chin, Markey, Bhargava, Kassam, & Loewenstein, 2017; Eastwood et al., 2012; Martin et al., 2006) that is frequently experienced by students across age groups, educational needs, and ethnicity (Preckel et al., 2010) while in educational contexts such as participating in learning activities in class, while studying, or testing (Pekrun et al., 2002).

Boredom. Boredom is a negative emotion comprising feelings of monotony and mind wandering (Pekrun et al., 2018) whereby one cannot meaningfully engage in a task, is unable to sustain required attention, and attributes an external environment as a cause of this aversive feeling (Eastwood et al., 2012). Boredom consists of "specific affective components (unpleasant, aversive feelings), cognitive components (altered perceptions of time), physiological components (reduced arousal), expressive components (facial, vocal, and postural expression), and motivational components (motivation to change the activity or to leave the situation)" (Pekrun et al., 2010, p. 532).

Boredom proneness. Boredom proneness is the recurring propensity or habitual disposition of becoming bored (Sharp et al., 2017), operationalized as an "individual's susceptibility to experience boredom" (LePera, 2011, p. 15).

Short Boredom Proneness Scale. The SBPS is an eight-item self-report questionnaire that measures the recurring propensity or habitual disposition of an individual towards becoming bored (Struk et al., 2017).

Character. Character describes the summation of a person's attributes and personality traits, predominant characteristic moral, social, and religious attitudes (VandenBos, 2007). Character refers to the complete set of positive traits that have emerged across cultures and throughout history as important for the *good life* (Park & Peterson, 2006) and to those aspects of personality that are morally valued (Park & Peterson, 2008).

Character strengths. Character strengths are the morally valued personality traits (Peterson & Seligman, 2004) that are manifest in people's thoughts, emotions, and behaviors (Park & Peterson, 2008; Peterson & Seligman, 2004). Character strengths are the psychological processes or mechanisms that are the distinguishable routes to displaying virtues (Park & Peterson, 2006), influenced by family, community, societal, and other contextual factors (Gillham et al., 2011).

Positive psychology. Positive psychology is a field of psychological theory and research that focuses on the psychological states, individual traits or character strengths, and social institutions that enhance subjective wellbeing and make life most worth living (VandenBos, 2007). Positive psychology emphasizes building a good and fulfilling life

by identifying individual strengths of character and fostering those strengths (Park & Peterson, 2008).

Signature strengths. Signature strengths are a person's top five, character strengths provided by the Values in Action Inventory of Strengths for Youth (VIAYouth-96; Park & Peterson, 2009).

Values In Action Youth-96. The VIA Inventory of Strengths for Youth (VIA Youth-96) is a 96-item self-report survey suitable for children and youth aged 10-17, that comprehensively assesses the 24 character strengths (Park & Peterson, 2006).

Virtues. Virtues are the qualities or characteristics that have positive connotations in a society and are beneficial to psychological health (VandenBos, 2007) and valued by moral philosophers and religious thinkers. These virtues are wisdom, courage, humanity, justice, temperance, and transcendence (Park & Peterson, 2006).

Chapter II: Review of the Literature

Researchers have identified academic boredom as a prevalent and potentially problematic emotion experienced by many students on a regular basis (Pekrun et al., 2002; Pekrun et al., 2014). The purpose of this study was to examine the relationship of boredom proneness and signature character strengths to academic achievement. In this chapter, the researcher explored existing research on the constructs of boredom, boredom proneness, positive psychology, and character strengths. A review of boredom literature highlighted the experience of boredom and provided an overview of supporting theories of boredom and analysis of the relationship of boredom to various psychosocial phenomena. Also, there was a discussion of antecedents and strategies to cope with academic boredom. Then, from a novel perspective through the lens of positive psychology, the researcher examined academic boredom and the effectiveness of character strengths-based interventions in academic settings. Lastly, the core aim of this review was to explore the association between boredom proneness and character strengths that existed in extant literature.

The Experience of Boredom

Martin et al. (2006) maintained that boredom was a complex construct and, according to Mann and Cadman (2014), there remained no true consensus regarding its definition. Nevertheless, research has found boredom to be such a common affective experience that, for most people, there is little trouble both recognizing it and distinguishing it from other emotions (Goldberg, Eastwood, LaGuardia, & Danckert, 2011; van Tilburg & Igou, 2012). Pekrun et al. (2010) stated that boredom was more than just a neutral state implying a lack of enjoyment or interest. According to Pekrun et

al. (2010), boredom consisted of specific "affective components (unpleasant feelings), cognitive components (altered perceptions of time), physiological components (reduced arousal), expressive components (facial, vocal, or postural expression), and motivational components (motivation to change the activity or leave the situation)" (p. 532). Van Tilburg and Igou (2017a) reported that boredom did not feel good, and it differed from other negative experiences such as anger, frustration, and disappointment. Goldberg et al. (2011) found that although boredom was associated with apathy and depression, it had unique experiential content making it an independent affective construct. Merrifield and Danker (2014) demonstrated that relative to sadness, boredom had a distinct physiological signature that included rising heart rate and increased cortisol levels.

According to Todman (2003) and Pekrun et al. (2010), boredom was an aversive state that may even be "extremely unpleasant and distressing" (Martin et al., 2006, p. 193). Elpidorou (2018) posited that the state of boredom included a desire to engage in a task other than the one with which one was currently engaging. Eastwood et al. (2012) stated that bored individuals reported feelings of constraint or a perceived lack of agency and may feel lethargy and a lack of energy, which was consistent with low arousal, or they may have feelings of restlessness and irritability, indicating elevated arousal (Martin et al., 2006). Cognitively speaking, Goldberg et al. (2011) reported that boredom entailed both dissatisfaction with and disengagement from one's environment. According to Eastwood et al. (2012), bored people experienced difficulties in concentrating and maintaining attention. Martin et al. (2006) and Pekrun et al. (2018) indicated that bored individuals may engage in mind-wandering. People have reported that boring situations

were meaningless or trite or lacked a sense of challenge (van Tilburg & Igou, 2012) or that they were too challenging (Daschmann et al., 2011; Goetz et al., 2008).

Theories of Boredom

Westgate and Wilson (2018) reviewed several theories that attempted to explain boredom and found the combined theories provided a multidimensional paradigm of boredom. Early psychodynamic theory held that boredom stemmed from the individual and the individual's inability to consciously determine what was desired (Mercer-Lynn et al., 2014) or from a repressed desire to do something meaningful (Sharp et al., 2017). Existentialists maintained that boredom occurred when an individual was unable to find meaning in life (Mercer-Lynn et al., 2014) or experienced an inner emptiness or a lack of purpose in life (Sharp et al., 2017). Functional theories of boredom emphasized the role of emotions in conveying information relevant to one's surroundings with boredom serving as a signal that motivates behavioral or cognitive change (Elpidorou, 2014, 2017). From the functional perspective, researchers have contended that boredom indicates whether an activity served a useful goal (Bench & Lench, 2013; Fisherl, 1993) or was meaningful (van Tilburg, 2017b). Arousal or environmental theories of boredom proposed an inadequate amount of, or mismatch in need of stimulation and its external or environmental availability (Westgate & Wilson, 2018). Chin et al. (2017) found that boredom can develop in conditions of either high arousal or low arousal due to incongruity in desired and experienced arousal. According to Eastwood et al. (2012) boredom has been associated with low arousal from inadequate external stimulation, as well as high internal arousal and frustration from the struggle to keep attention focused.

Although existing theories vary, they concluded that a bored person wished to, but was unable to, become engrossed in satisfying activity (Eastwood et al., 2012).

Cognitive theorists have determined that bored individuals perceived their environments as being both monotonous and/or uninteresting (Chin et al., 2017). Other cognitive theorists found that bored individuals' attentional systems fail to successfully orient, engage, and maintain focus on an activity (Eastwood et al., 2012; Fisherl, 1993; Martin et al., 2006). Researchers have emphasized that the ability to cognitively generate interest or entertainment may reduce boredom (Seib & Vodanovich, 1998). Watt and Vodanovich (1999) and Eastwood et al. (2012) found that those who were able to provide their own mental stimulation or engage in task-related imagination were better able to escape the negative experience of boredom. Gerritsen, Toplak, Sciaraffa, and Eastwood (2014) investigated the specific cognitive factors of inattention, hyperactivity, impulsivity, and executive dysfunction that may contribute to boredom and found that executive system dysfunction, which is responsible for such cognitive activities as planning, organizing, working memory and action initiation, predicted the tendency to experience boredom. Hunter and Eastwood (2018), however, found that, while experiencing boredom was associated with the ability to maintain one's attention, it was not attributable to negative affect or disordered executive function. Damrad-Frye and Laird (1989) similarly indicated that boredom may also be due to disruptions in the cognitive orienting network, which selectively allocates attention when faced with subtle distractions. In Damrad-Frye and Laird's (1989) study, participants exposed to barely noticeable television noise levels while trying to read a moderately interesting magazine article were unaware of the source of the noise distraction but reported greater levels of

boredom and found the task less interesting than did participants in either loud or muted conditions, and these participants attributed their distractibility to the task material.

Wang et al. (2017) confirmed that achievement emotions were important for students' cognitive, motivational, and regulatory processes in their learning. Pekrun et al. (2010) determined that boredom was related to attention problems in that it reduced the availability of cognitive resources by decreasing concentration and increasing distractibility. Pekrun et al. (2014) reported that boredom withdrew one's attention from activities lacking value and directed it toward more rewarding and stimulating activities. According to Pekrun's control-value theory of achievement emotions (2006), which incorporated the effects of emotions experienced in academic settings, boredom negatively correlated with intrinsic motivation to learn, study effort, and use of study strategies. The control-value theory suggested that activation of achievement emotions, such as boredom, happened following cognitive judgments of control over and subjective value of, academic activities and their outcomes (Pekrun et al., 2014). Control-value theory predicted the positive or negative outcome direction or *valence* of educational tasks based upon the emotions aroused in relation to the importance attached to completing them (Sharp et al., 2017). According to Pekrun et al. (2018), boredom occurred when an activity lacked value, such as when there was a perception of a lecture as monotonous or learning materials as disinteresting. As for perceived competence and related task demands, boredom occurred under either of two conditions which relate to one's perceived level of ability to successfully control the outcome; under-challenge defined by low perceived task demands coupled with high perceived competence to

master the task or over-challenge defined by high perceived demands coupled with low perceived competence (Pekrun et al., 2018).

Westgate and Wilson (2018) adopted a similar cognitive perspective that blended attention and meaning and stated that boredom was an indicator of unsuccessful attentional engagement in a valued goal-congruent activity which happened when people felt either mentally unable or unwilling to cognitively engage. In the meaning and attention model of boredom, Westgate and Wilson (2018) told about whether cognitive engagement in a task was successful and whether the task was valuable and worth pursuing. Boredom was the result of mismatches between cognitive demands and available mental resources and between activities and valued goals (Westgate & Wilson, 2018).

Finally, other causal models of boredom have stressed that the experience of boredom has both situational and individual determinants, underscoring interactions between situation or environment and person (LePera, 2011). Person-based theories of boredom implied that an individual who possessed the requisite characteristics will tend to become bored in a variety of situations, and so to better understand boredom Mercer-Lynn et al. (2014) contended that there should be a focus on the individual experiencing it. The idea that characteristics of the person play a key role in the experience of boredom has led to the delineation between the state of boredom and the trait of boredom.

State and Trait Boredom

Neu (1998) noted differences between *endogenous* boredom (i.e., boredom that comes from within) and *reactive* boredom (i.e., boredom in response to the environment).

Within psychology, researchers have defined boredom as a state or trait emotional condition (Weinerman & Kenner, 2016). According to Goetz, Cronjaeger, Frenzel, Ludtke, and Hall (2010), state emotions were those emotions experienced at a specific point in time whereas trait emotions were habitual reoccurring emotions. Said another way, Todman (2003) indicated that state boredom was the actual subjective experience of boredom and trait boredom was the individual's dispositional susceptibility to boredom. Fischerl (1993) described state boredom as an unpleasant, transient emotional state in which an individual felt a "pervasive lack of interest and difficulty concentrating on the current activity" (p. 396). Conversely, Fischerl (1993) described trait boredom, otherwise known as boredom proneness, as a tendency, propensity, or susceptibility to experiencing boredom frequently and in a wide range of situations. Elpidorou (2017) clarified that without the subjective experience of state boredom one could neither be prone to boredom nor possess the trait of boredom. According to Elpidorou (2014), the frequent experience of boredom was like a pervasive lens through which one viewed the world and the boredom prone person experienced boredom even in situations that others found interesting and stimulating.

Correlates of Boredom

In a naturalistic investigation of how individuals experience boredom in everyday life, Chin et al. (2017) used a quantitative methodology to sample a diverse set of 3,867 U.S. adults' experience of boredom every waking half-hour for 7 to 10 days, generating over 1.1 million observations. These subjects answered questions on an iPhone app to report details about what they were doing, who they were with, and their location, as well as their experience of 16 other emotions. Using correlation statistics, Chin et al. (2017)

found that boredom was more likely to co-occur with negative emotions, and was predictive of loneliness, anger, sadness, and worry. Boredom was more prevalent among men, youth, the unmarried, and those of lower income. Boredom was rarely experienced when with children, a partner or spouse, or friends. Elevated levels of boredom existed in situations involving monotonous or difficult tasks, such as studying or working or in contexts of constrained autonomy. Regarding location, respondents were most frequently bored in schools, colleges, medical facilities, airports, and places of work and were least bored in restaurants, or gyms, or health clubs (Chin et al., 2017).

Boredom proneness has been associated with a plethora of physical, psychological, and social harms (Vodanovich, 2003) and greater somatization complaints (Sommers & Vodanovich, 2000). Boredom proneness has been associated with apathy (Kashdan et al., 2004), depression and anxiety (Farmer & Sundberg, 1986; Goldberg et al., 2011; LePera, 2011; Mercer-Lynn et al., 2014; Rupp & Vodanovich, 1997; Vodanovich 2003), procrastination (Vodanovich & Rupp, 1999), neuroticism (Mercer-Lynn, Flora, Fahlman, & Eastwood, 2013; Mercer-Lynn, Hunter, & Eastwood, 2013; Sulea et al., 2015), substance abuse (LePera, 2011), gambling (Elpidorou, 2014), lack of self-control (Isacescu, Struk & Danckert, 2016), and anger and aggression (Dahlen et al., 2004; Mercer-Lynn, Hunter & Eastwood 2013; Rupp & Vodanovich, 1997). Researchers have found people who were prone to boredom to be less curious (Kashdan et al., 2004), be less self-aware (Seib & Vodanovich, 1998), have less optimal interpersonal and social relationships (Watt & Vodanovich, 1999), and possess lower job and life satisfaction (Farmer & Sundberg, 1986) compared to those who were not prone to boredom. Investigating boredom proneness and personality in a quantitative study,

Culp (2006) used the Boredom Proneness Scale (Farmer & Sundberg, 1986) and the HEXACO Personality Inventory (HEXACO-PI) (Lee & Ashton, 2004) and found that elevated scores on the external stimulation scale were negatively correlated with honesty-humility, conscientiousness, and emotionality and elevated internal stimulation scores were related to extraversion, conscientiousness, and openness to experience. Also using a quantitative design Sulea et al. (2015) administered five Likert-style surveys to third- and fourth-year Romanian college and with multiple regression analyses found that boredom was negatively related to conscientiousness and agreeableness. Similarly, Hunter et al. (2016) sampled 288 people with a mean age of 21.70 and found that boredom proneness was negatively associated with honesty- humility, extraversion, agreeableness, conscientiousness, and openness to experience and positively associated with emotionality.

Researchers have identified the boredom experienced in academic contexts as a debilitating emotion that adversely influenced students' educational development, performance, and achievement (Daniels et al., 2009; Macklem, 2015; Nett et al., 2010; Pekrun et al., 2010; Pekrun et al., 2014). Daschmann et al. (2011) found that bored students were likely to experience lower grades, higher rates of absenteeism, and be at greater risk for dropping out of school. Boredom prone students have shown lower scores on career planning, lifestyle planning, peer relationships, educational involvement and salubrious lifestyle than non-bored students (Vodanovich et al., 1999). According to Macklem (2015), students who believed that an academic subject was useless were more likely to get bored, and student boredom was higher in core subject areas as compared to music or gym class.

Use of high-end technologies as learning tools in 21st century classrooms has increased (Maris, Maris, Dungan, & Slavici, 2018), and prior research has emphasized the relationship between high boredom proneness and internet-use disorder (Lin, Lin, & Wu, 2009; Rahmani & Lavasani, 2011; Wegman, Ostendorf, & Brand, 2018). Li, O'Brien, Snyder, and Howard (2015) found that boredom triggered excessive internet use in people who experienced health or psychosocial problems due to intensive internet use. Additionally, Wegmann et al. (2018) found that individuals who have a higher susceptibility to experience boredom are more apt to avoid negative feelings by using online-communication applications. In a quantitative study of the associations between boredom proneness and Internet addiction, Chou, Chang, and Yen (2018) used the short form of the Boredom Proneness Scale (BPS-SF) that Vodanovich, Wallace, and Kass (2005) designed and a Likert-style internet addiction questionnaire to sample 300 adolescents ages 11-18 diagnosed with attention deficit hyperactivity disorder (ADHD). Using regression analysis Chou et al. (2018) found that those with high scores for lack of external stimulation were at a higher risk of Internet addiction, specifically online gaming. Higher scores for lack of internal stimulation were significantly associated with a low tendency to engage in online studies. In a quantitative study of Jordanian undergraduate students, Jaradat (2015) used the BPS-SF and through multivariate and two-way analysis of variance found that females scored higher than males on lack of external stimulation. Castens and Overby (2009) investigated the association of boredom proneness with academic achievement in 166 college students exhibiting symptoms of ADHD by administering the BPS (Farmer & Sundberg, 1986), an insomnia questionnaire, and a self-esteem scale, and through correlation statistical analysis found

that boredom proneness was positively correlated with symptoms of ADHD. Prior research has confirmed the relationship between boredom proneness and ADHD (Fahlman, Mercer-Lynn, Flora, & Eastwood, 2013; Malkovsky et al., 2012).

Academic Boredom

Related to educational settings, Pekrun et al. (2002) defined academic boredom as the specific type of boredom experienced by students during activities related to achievement, such as preparing for and participating in class and studying for tests. According to Malkovsky, Merrifield, Goldberg, and Danckert (2012) high boredom prone individuals could be either *apathetic*, or unconcerned with environmental factors, or *agitated*, indicating motivation to engage in meaningful activities despite successful attempts to do so. Sampling university and high school students with a quantitative questionnaire delivered via a personal digital assistance device and using latent profile analysis and correlation, Goetz et al. (2014) presented a typology of academic boredom to classify an individual's boredom experiences along the dimensions of valence and arousal. The first type of boredom labeled *indifferent* corresponded with low arousal and slightly positive valence and reflected an indifference to, and withdrawal from, the external world. *Calibrating* boredom was associated with low arousal and slightly negative valence and represented a slightly unpleasant experience associated with receptiveness to boredom-reducing options but not actively searching for alternate behaviors or thoughts. *Searching* boredom had a more negative valence and higher arousal and represented a moderately unpleasant experience and was associated actively seeking out specific ways of minimizing feelings of boredom. *Reactant* boredom had elevated levels of arousal and negative valence and represented a very unpleasant

experience and was strongly associated with the need to escape the situation. The last type, *apathetic* boredom had elevated levels of negative valence combined with low levels of arousal and represented an especially unpleasant experience (Goetz et al., 2014). According to Macklem (2015), reactant and apathetic boredom subtypes were most common in the school setting.

Previous perspectives on boredom have identified several causes of the emotion of academic boredom. Building on previous work that addressed potential antecedents to boredom (e.g., Farmer & Sundberg, 1986; Martin et al., 2006), Daschmann et al. (2011) sampled 1380 students in grades 5-10 via questionnaires and identified eight factors that contributed to boredom: over challenge, under challenge, an unchanging routine, not finding meaning in learning, having better things to do than be in class, disliking the teacher, feeling uninvolved, and boredom tendency in general. In the sample (Daschmann et al., 2011), girls were more likely bored due to being over-challenged, perceiving a lack of meaning, whereas boys were more likely bored due to being under-challenged

Boredom Coping Strategies

In 2010, Nett et al. reported that students continued to experience boredom as a common emotion in school despite teachers' efforts to generate interesting lessons. Given that both environment and personal factors have contributed to the experience of boredom, research indicated that complete amelioration by instructors' efforts to create non-boring learning environments was unlikely (Daniels et al., 2015; Gerstner & Bogner, 2017). Eren and Coskrun (2016) reported that, depending on the situation, students used

diverse boredom coping strategies during lessons and the strategies they used may have impacted their achievement outcomes.

Nett et al. (2010) used a questionnaire to sample 38 classes involving students in grades 5-10 and through latent profile analysis and latent class analysis, named three different coping strategy types and developed a four-component framework of boredom coping strategies based on thoughts or behaviors of either approach or avoidance. Weinerman and Kenner (2016) summarized these strategy types; *evaders* used avoidance strategies and sought other things to do rather than engage with boring material, *criticizers* sought to reduce boredom by shifting responsibility to or blaming the teacher to make the material more interesting, and *reappraisers* realized boredomwas an internal condition and took active steps to re-engage with the material. According to this model, cognitive-approach strategies required the bored individual to change perceptions about the situation by, for example, thinking about the importance of the lesson whereas behavioral-approach strategies required the person to change the situation itself, for instance, by asking the teacher for more interesting tasks or questions during lessons. Conversely, cognitive-avoidance strategies entailed mental activities not relevant to the current situation such as studying something irrelevant during lessons, whereas behavioral-avoidance strategies included activities not associated with the current situation, such as chatting with a classmate (Nett et al., 2010). Those who reappraised the learning situation and used cognitive-approach strategies experienced less boredom than *criticizers* who used behavioral-approach strategies together with the cognitive and behavioral-avoidance strategies and *evaders* who used cognitive-avoidance and behavioral-avoidance strategies (Nett et al., 2010).

Westgate and Wilson (2018) also confirmed that strategies to reduce boredom are varied and suggested that people could lower boredom levels either by bringing activities into alignment with valued goals or by calibrating the cognitive demands of the activity. Westgate and Wilson (2018) identified four routes to alleviating boredom: switching activities, regulating goal value, regulating cognitive demand, and regulating mental resources. Despite the availability of options, people may not always be aware of the best strategy to reduce boredom in each instance, and even when aware, may not be able to deploy it (Westgate & Wilson, 2018). According to Hunter et al. (2016), for those who are frequently bored, the opportunity to effectively address it eludes them; if these individuals were able to productively channel their boredom, they would not report chronic boredom.

Positive Psychology and Positive Education

It was the view of this researcher that helping students overcome proneness to boredom begins with educational leaders changing the way they interpret student boredom issues in the classroom, and this may be a new avenue for decreasing student boredom and subsequent consequences associated with it. Some educators have considered engaging disengaged pupils to be one of the biggest challenges they face (Chang, 2009). Skinner and Belmont (1993) concluded that teacher withdrawal of support from disengaged and disaffected students could increase those students' level of disaffection, increasing the likelihood of student underachievement and eventual dropout. In previous decades, researchers and practitioners have focused on the human condition according to a disease model in which health and wellbeing were the absence of distress and disorder; however, recent balanced attention has included the positive aspects of

development, including character strengths and life satisfaction (Park & Peterson, 2008). There has been a shift in inquiry from only a deficit-focus to also an asset-focus, preparing abundant opportunities for investigation (Lindley et al., 2006). When making important decisions including screening, diagnosing, placing children and adolescents in specialized programs and providing them with accommodations and modifications, Rashid et al. (2015) suggested that assessment should be a hybrid tool, exploring strengths as well as weakness. By investigating boredom from a lens of positive psychology and in relation to signature character strengths, students and teachers may be able to emphasis the positive aspects of youth's school experiences, thus providing a platform for mitigating academic boredom and fostering successful outcomes. Through the application of the positive psychology concept of character strengths to learning activities perceived as boring, this researcher believed that situational and emotional climates may emerge that reduce the tendency to experience academic boredom.

The advent of positive psychology was in the 1998 Presidential Address to the American Psychological Association (Seligman, 1999). Since the positive psychology movement emerged at the turn of this century, it has experienced considerable publicity (Linley et al., 2006), as if it were a "paradigm shift opening new hopes for a better future, focused on the well-being of people and of society in general" (Alzina & Paniello, 2017, p. 59). Linley et al. (2006) offered that there are books, journal articles, web pages, email discussion lists, dedicated conferences, and international associations and courses included as part of existing degree programs representing and promoting the interests of positive psychology.

According to Seligman and Csikszentmihalyi (2000), positive psychology was the scientific study of what goes right in life. Researchers specified that positive psychology studied the conditions and processes that contributed to flourishing or optimal functioning (Gable & Haidt, 2005; Linley et al., 2006). Seligman, Parks, and Steen (2004) suggested that the goal of positive psychology was to make people happier by understanding and building positive emotion, gratification, and meaning. Additionally, Seligman and Csikszentmihalyi (2000) concluded that the aim of positive psychology was to change the focus of psychology from "repairing the worst things in life to also building positive qualities" (p. 5). Park and Peterson (2008) explained that the framework of positive psychology identified domains critical to the psychological good life including positive subjective experiences, positive individual traits, positive relationships, and positive groups and institutions, and maintained that people are at their best when all these areas are in alignment. As clarified by Alzina and Paniello (2017), positive psychology did not deny the problems that people experience but asserted that when conditions and processes were functioning in harmony, they helped improve people's quality of life and prevented the incidence of psychopathology.

Over the past two decades, there has been notable attention from researchers, practitioners, and policymakers to the application of positive psychology across fields including education (White & Kern, 2018). In the educational sphere, this interest has evolved into the domain of *positive education* (Shoshani, Steinmetz, & Kanat-Maymon, 2016), an area that Seligman et al. (2009) said integrated elements of positive psychology with educational practices to promote wellbeing and mental health of school children. Researchers have regarded positive education as an umbrella term to describe empirically

validated interventions from positive psychology that have an impact on student wellbeing (Seligman et al., 2009; White & Waters, 2014). Research and advocacy for positive education have been "supported through national and international organizations such as the International Positive Psychology Association's education division, the Positive Education Schools Association, and the International Positive Education Network" (White & Kern, 2018, p.1).

Gable and Haidt (2005) indicated that concepts of positive psychology may serve as buffers against the stressors and problems in life and positive emotions may play a role in reducing negative emotions such as academic boredom. Fredrickson (2011) proposed that according to the broaden-and-build theory of positive emotions that emerged from positive psychology, focusing on positive emotions may increase a person's momentary thought-action repertoire, undo negative emotions, fuel psychological resilience, and trigger upward spirals toward enhanced emotional wellbeing. Seligman (2011) included positive emotions, engagement, positive relationships, meaning, and achievement (PERMA) in the model of wellbeing and demonstrated its applicability in school settings. Regarding positive emotions, Pekrun et al. (2002) confirmed the association of student's positive emotions and their school engagement and satisfaction, motivation for learning, and academic efforts.

According to Farmer (2011), proponents of positive psychology acknowledged student difficulties such as social-emotional concerns and attended to students' strengths, and then empowered students to use those strengths to meet expectations. Farmer (2011) concluded that positive psychology was about exploring how weaknesses and strengths intersect and using individual personal strengths to decrease negative emotions and

achieve positive outcomes. According to Seligman (2002), emphasis on positive human characteristics allowed for better treatment and prevention of mental illnesses, and therefore it was reasonable to posit that by examining academic boredom through its association with positive characteristics, schools may be able to instill the qualities that help individuals flourish. The present investigation sought this unique perspective to discover the relationship of the trait of boredom to the various character components that make up one's individual character strength profile.

Positive Psychology Interventions

Shankland and Rossett (2017) explained that education and positive psychology were natural allies; both were about nurturing strengths, and about growing and experiencing emotional and social wellbeing. Linley et al. (2006) specified that schools were a primary place for instilling values of a culture in young people and these institutions could serve as the vehicle for positive psychology's promotion of optimal human development. According to White (2016), schools were increasingly adopting learning programs that promoted self and social awareness and management. Social-emotional learning programs, for example, have yielded positive effects on targeted social-emotional competencies and attitudes about self, others, and school and have reduced conduct problems and improved academic performance on achievement tests and grades (Durlak et al., 2011). In their quantitative analysis of 213 studies involving 270,034 students from kindergarten through high school, Durlak et al. (2011) calculated the index of effect, examined overlapping confidence intervals, used the maximum likelihood estimation procedure, and examined the significance of the heterogeneity of a group of effect sizes. Durlak et al. (2011) showed that, on average,

school students enrolled in a social and emotional learning program ranked 11 percentage points higher on achievement tests than school students who did not participate in such programs.

As indicated by Buck, Carr, and Robertson (2008), positive interventions, then, can help educators fulfill their overarching goal of preparing young people to deal with the mounting complexities of life and take on the emerging challenges of the 21st century. Davidson (2014) advised that, in addition to knowledge and technical skills, educators must teach performance character to students with intensity and intentionality as well. According to Seligman et al. (2009), a key tenet within the field of positive education was that it was possible to explicitly teach and assess the skills and mindsets that promoted positive emotions, positive relationships, and character strengths. White and Kern (2018) confirmed that positive education could involve explicit lessons and implicit learning through aspects of the school culture and even short-term increases in positive emotions mediated the relationship between positive activities and wellbeing (Lyubomirksy & Layous, 2013).

In a quantitative, randomized, controlled evaluation of the high school positive psychology curriculum, Seligman et al. (2009) assigned 347 ninth-grade students to language arts classes that contained positive psychology curriculum or did not contain positive psychology curriculum. The goals of the positive psychology curriculum were to help students identify their signature character strengths described in the VIA classification (Peterson & Seligman, 2004) and to increase students' use of these strengths in day-to-day life. In addition to these goals, the intervention (Seligman et al., 2009) promoted resilience, positive emotion, and students' sense of meaning or purpose.

The curriculum consisted of 20, 80-minute sessions delivered over the 9th-grade year. Most lessons featured the discussion of character strengths, an in-class activity, a real-world homework activity that encouraged students to apply concepts and skills in their own lives, and a follow-up journal reflection. Students, their parents, and teachers completed questionnaires before and after the program through two years of follow-up, which measured students' character strengths, social skills, behavioral problems, enjoyment of school, and grades. According to teacher reports, the positive psychology program interventions increased students' enjoyment of school, social skills, engagement in school, and learning strengths as indicated by increased levels of curiosity and love of learning. In addition, participation in the positive psychology program improved achievement in students in non-honors classes (Seligman et al., 2009). Waters (2011) confirmed that when character strengths were in the curriculum, students further developed their character strengths and social skills, as well as benefited from greater enjoyment, hope, engagement, and academic confidence.

Strengths-based educational models have emphasized the positive aspects of student effort and achievement, as well as human strengths (Lopez & Louis, 2009). Strengths-based education, according to Lopez and Lewis (2009), underscored the importance of measurement of strengths and potential positive outcome, individualization, networking with other people who can affirm one's strengths, application of strengths inside the classroom, and development of strengths through practice across an extended time. Evidence from systematically evaluated school-based positive psychology interventions showed that positive psychology programs were significantly related to student wellbeing, relationships and academic performance

(Waters, 2011). Lyubomirsky and Layous (2013) developed the positive-activity model to explain how and under which conditions positive activities such as cultivating strengths contribute to individual wellbeing and suggested that even short-term increases in positive emotions mediated the relationship between positive activities and wellbeing. Ghielen, Woerkom, and Meyers (2017) confirmed that, according to the positive activity model, interventions that stimulated positive activities triggered "positive emotions, positive thoughts, positive behaviors, and need satisfaction, which, in turn, lead to a greater sense of overall well-being" (p. 6).

Character Strengths

Park, Barton, and Pillay (2017) specified that character refered to the group of morally valued positive aspects of one's personality evidenced in thoughts, affect, and actions. Park and Peterson (2009) explained that each of these aspects of one's personality existed in degrees or along a continuum. Park (2009) viewed good character as integral to youth development and societal wellbeing; its cultivation in the lives of students has been a universal goal for educators through the ages. Specific definitions have varied across times and cultures; however, Park (2009) confirmed that good character was comprised of the qualities possessed by leaders and the positive qualities viewed as essential for life-long development and productive thriving. According to Park (2009), good character was multidimensional and made up of positive and distinct strengths, and a variety of influences contributed to the development of good character—family, friends, and community cultures. Park et al. (2017) stated that the importance of character and virtues for personal and societal wellbeing remained constant, and there has been a deliberate effort to define what constitutes good character and ways to measure it

(e.g., Dahlsgaard, Peterson, & Seligman, 2005, Park & Peterson, 2008; Peterson & Seligman, 2004). According to Park and Peterson (2009), measurement of young people's character assets with emphasis equal to that of tracking deficits and shortcomings has required no trade-off with monitoring traditional academic goal progress.

Peterson and Seligman (2004) defined character strengths as those characteristics of people that allow them optimal functioning. Park and Peterson (2006) added that character strengths laid at the center of moral competence and motivated the personal desire to actively do what is good; they were the processes or mechanisms that helped people display core virtues. Joseph and Linley (2004) and Park et al. (2017) said that character strengths were the unique ways in which a person demonstrated or displayed virtues. Park and Peterson (2009) further summarized that character strengths were trait-like habits that were stable over time and across situations and influenced by role models, dramatic events, and repeated activation. Foxworth (2016) explained that through the process of habituation, the emotions felt positively reinforced virtuous behaviors, and the result was an appreciation for the inherent goodness of the virtues. Peterson and Seligman (2004) reported that character strengths were typically greatly underused because most people tended to focus on their weaknesses instead. Since the use of character strengths has been associated with desirable outcomes, Freidlin, Littman-Ovadia, and Niemiec (2017) suggested that it was worth investigating whether academic boredom was associated with underuse of specific character strengths.

Recently within the field of positive psychology, attention to assessment and intervention derived from an understanding of character strengths has given rise to the

development of frameworks to describe and organize them (Shogren, Wehmeyer, Lang, Niemiec, & Seo, 2017). One such framework has been the *VIA Classification of Strengths* (Peterson & Seligman, 2004), formerly referred to as the Values in Action Classification. Peterson and Seligman (2004) reported that the VIA Classification of Strengths project focused on what was right about people and specifically about the character strengths that made the good life possible. With this model, Peterson & Seligman (2004) recognized the need for a common vocabulary and set of character traits to inform schools about how to design and evaluate programs for character education and development. Seligman et al. (2009) indicated that the VIA Classification framed the understanding of character in global terms, defined the personal qualities that have inspired people universally, and illuminated what was unique to the individual person.

Seligman et al. (2009) also offered that the precise ways in which strengths of character development are unknown, and the VIA Classification was descriptive and not based on any given theory. Foxworth (2016) specified that the VIA Classification included 24 character strengths, which were each examined using 10 criteria and organized in terms of six core virtues. Peterson and Seligman (2004) defined virtues as the core characteristics valued by moral philosophers and religious thinkers: wisdom, courage, humanity, justice, temperance, and transcendence. Based on the VIA Classification of Strengths, researchers adapted the adult version of the *VIA Inventory of Strengths* (VIA-IS; Peterson & Seligman, 2004) by using self-reports of youth ages 10-17 to develop the *VIA Inventory of Strengths for Youth* assessment (VIA-Youth; Peterson & Seligman, 2004) and the VIA Youth-96 (Park & Peterson, 2006). Park and Peterson (2006) affirmed that the VIA Youth-96 was the free self-report survey that assessed the

character strengths among youth ages 10–17, and when completed, the participants received a ranked listing of their top strengths or signature strengths. According to Park et al. (2017), one's signature strengths were the strengths that a person internalized, promoted and often practiced. Peterson and Seligman (2004) indicated that adults usually had between two and five signature strengths regularly displayed in relevant settings and recognized by others as highly characteristic of the individual. In addition to the self-report questionnaire, researchers have used several different methods to assess character strength: focus groups, structured interviews, informant reports, and case studies (Peterson & Seligman, 2004).

Seligman et al. (2005) reported that virtually everyone had some notable character strengths that were frequently exercised and identifying signature strengths and using them in their everyday lives may lead to a psychologically fulfilling life. Struk et al. (2017) confirmed that the VIA Youth-96 survey allowed the comparison of character strengths across individuals and identified and ranked an individual's signature strengths relative to his other strengths. Park et al. (2017) added that not everyone could have all the strengths of character, and while the components of character were moderately stable over time, genetics, family, friends, and teachers influenced character strengths. Park et al. (2017) reiterated that character strengths had a developmental trajectory; character strengths could and do change in response to specific events or as the result of maturation.

Park, Peterson, and Seligman (2006) reported that people from various socio-demographic classifications possessed a consistent distribution of character strengths. A study with 111,676 adults from 54 nations and all 50 U.S. states found

convergence in the prevalence of the 24 different VIA strengths (Park, Peterson, & Seligman, 2006). In most nations on all continents, the most commonly endorsed strengths were kindness, fairness, honesty, gratitude, and judgment, and the lesser strengths included prudence, humility, and self-regulation. Comparisons within the U.S. sample showed no differences based on state or geographical region, except for spirituality (Park et al., 2006). Examining demographic correlates of the VIA strengths within the U.S. sample, Peterson and Park (2009) found that females scored higher than males for the strengths of gratitude, kindness, and love, older adults scored higher than younger adults on strengths of temperance, those with more education loved learning more than those with less education, married people were more forgiving than those who were single, and African Americans and Asian Americans were more spiritual than European Americans (Peterson & Park, 2009). Successful recovery from physical illness was associated with increases in the strengths of bravery, kindness, and humor, whereas successful recovery from psychological disorder was associated with modest increases in appreciation of beauty and love of learning (Peterson, Park, & Seligman, 2006). Additionally, exposure to trauma resulted in increases in the character strengths of spirituality, gratitude, kindness, hope, and bravery (Peterson, Park, Pole, D'Andrea, & Seligman, 2008).

Character strengths have related to many important aspects of a healthy and flourishing life and their absence to problems (Peterson & Park, 2009). Among adults, Park, Peterson, and Seligman (2004b) found that several strengths showed a strong relation with life satisfaction, happiness, and psychological wellbeing: love, gratitude, hope, curiosity, and zest (Park, Peterson, & Seligman, 2004b). Among youth, the

predictors of life satisfaction were love, gratitude, hope, and zest (Park & Peterson, 2006). Character strengths have also related to less psychopathology among youth. According to Peterson and Park (2009), the strengths of hope, zest, and leadership were related to fewer internalizing problems such as depression and anxiety disorders, whereas the strengths of persistence, honesty, prudence, and love were related to fewer externalizing problems such as aggression.

Character Strength-Based Interventions

Park and Peterson (2009) suggested that practitioners could use a strengths-based approach with people at any level and of any ability, including intervening with students having a history of disability or poor achievement, as a strength-based approach may foster rapport and increase student motivation. According to Quinlan et al. (2011), the rationale for strength-based interventions was that the use of one's strengths was engaging and fulfilling; therefore, the development of an individual's top strengths should lead to increased engagement and achievement and enhance wellbeing. In a sample of 12-year-old Swiss school children who took the VIA-Youth (Park & Peterson, 2006), a life satisfaction scale, an academic self-efficacy scale, and a classroom behavior rating scale, quantitative t-tests correlation analyses revealed that the specific character strengths of self-regulation, perseverance, and love of learning were predictive of school success as operationalized by GPA (Weber & Ruch, 2012). Similarly, in a sample of Israeli adolescents beginning middle school, Shoshani and Sloan (2013) employed quantitative methods to survey teachers about students' adjustment and friendships and measured students' wellbeing. Shoshani and Sloan (2013) administered the VIA-Youth (Park & Peterson, 2006) and four Likert-types scales including a school engagement

survey, a school adjustment report, an affectivity scale, and a life satisfaction scale. Through repeated measures t-tests and bivariate correlation analyses Shoshani and Sloan (2013) found that intellectual and temperance strengths predicted GPA. Interpersonal strengths predicted social functioning, and temperance and transcendence strengths were robust positive predictors of students' subjective wellbeing (Shoshani & Sloan, 2013; Toner et al., 2012). In a quantitative longitudinal study examining the correlation between academic achievement and character strengths among students, Park and Peterson (2009) used the VIA-Youth survey and found that after controlling for student IQ scores, the character strengths of perseverance, fairness, gratitude, honesty, hope, and perspective predicted end-of-year grade point averages.

Also predictive of end-of-year GPA for middle school students were the character strengths of perseverance, fairness, love, gratitude, honesty, hope, and perspective (Park, 2009). Lounsbury, Fisher, Levy, and Welsh (2009) were the first to provide quantitative support for the general hypothesis that character strengths were positively related to the academic success of college students as represented by a student's GPA. Using the VIA-IS and a general life satisfaction scale and college satisfaction scale, Lounsbury et al. (2009) employed correlation and multiple regression statistical analysis and found that the character strengths of persistence, open-mindedness, self-regulation, love of learning and prudence correlated with GPA.

To gain insight into the effectiveness of strengths-based interventions in academic settings, Quinlan et al. (2012) conducted a literature review that included eight studies of strengths and found significant positive results in terms of wellbeing and academic self-efficacy from all the studies. Weber and Ruch (2012) measured school-related

satisfaction and academic self-efficacy of 247 students with a mean age of twelve years using the VIA-Youth surveys on school-related satisfaction and academic self-efficacy, teacher-ratings on positive classroom behavior, and grades from students' school reports. Through correlation analysis, Weber and Ruch (2012) found that love of learning, zest, gratitude, perseverance, and curiosity were positively associated with school-related satisfaction. Additionally, hope, love of learning, perseverance, and prudence, were positively associated with academic self-efficacy. Character strengths of self-regulation, perseverance, and love of learning predicted school success (Weber & Ruch 2012). In a study of students in grades five through seven, Weber, Wagner, and Ruch (2016) administered the VIA-Youth (Peterson & Seligman, 2004) and a positive and negative affect scale and found through correlation analysis that character strengths of zest, perseverance, love of learning, social intelligence, perspective, hope, teamwork, and gratitude related to positive affect and low scores in teamwork, hope, self-regulation, and love yielded relationships with negative affect. Perseverance, zest, love of learning, perspective, hope, prudence, and social intelligence were associated with students' positive school functioning. Perspective and leadership, love of learning, perseverance, hope, social intelligence, prudence, and humor showed positive relationships with overall school achievement (Weber et al., 2016). This was in line with earlier researchers who found perseverance, love of learning, prudence, and perspective to be related to college students' self-reported school success (Lounsbury et al., 2009).

Weber and Ruch (2012) and Wagner and Ruch (2015) found that high scores in good character did not automatically lead to high academic achievement, but high character scores may influence students to show a set of related behaviors, which then

inclined toward higher grades later. Weber et al. (2016) reported that character strengths enabled students to experience school-related positive emotions, which in turn supported students' positive school functioning and their overall achievement (Weber et al., 2016). When expressed in overt behaviors, Lounsbury et al. (2009) found that character strengths contributed to positive behavior in the classroom environment; students who had higher levels of self-regulation persisted more in their studies engaged in objective analysis and critical thinking and were likely to have higher GPAs than students who were lower on these characteristics. Lounsbury et al. (2009) also proposed that voluntary behaviors leading to better grades including attending classes and mastering course materials might show evidence of a greater love of learning. Wagner and Ruch (2015) reasoned that students who were prudent in the decisions they made may be more likely to comply with rules and thus less likely to do things in the classroom that fell outside the teachers' expectations, leading to better academic performance. Park and Peterson (2006) found that character strengths including social intelligence, when applied in the classroom, may manifest as cooperative class behavior, and perseverance and love of learning evidenced as the ability to work autonomously.

Character Strengths and Students with Disabilities

Limited attention to assessing and promoting the strengths of character for students with disabilities has been the norm (Niemiec, Shogren, & Wehmeyer, 2017). Increasingly, though, those who issue policy and best practice recommendations in special education and transition services have recognized that information on limitations in functioning alone is not enough to guide the development of a comprehensive plan for education and support services (Shogren et al., 2018). Identification has focused on

student interests, external support resources, and communicative competency skills, with minimal substantive attention directed toward individual strengths of character (Niemiec et al., 2017). Shogren et al. (2017) stated that consideration of the strengths of adolescents and young adults with disabilities was an integral component needed to inform the process of transitioning to meaningful post-school goals. Shogren et al. (2017) piloted a study of the application of the VIA-Youth with secondary students with and without disabilities, underscoring the importance of enabling educators to have access to valid and reliable assessments for students with disabilities who receive educational supports and services in public schools. School personnel from 16 districts, representing urban, semi-urban, and rural districts, referred students for participation. Participants included youth with (n = 176) and without (n = 135) disabilities, ages 12 to 22 (M = 16.9). Of those with disabilities, 32% of the sample had learning disabilities and 19% of the sample had intellectual disabilities. Results suggested strong similarities in the reliability of scores of the VIA-Youth across adolescents with and without disabilities. Youth with disabilities scored slightly less adaptively in the ratings of their character strengths but differed significantly from non-disabled students only in the strengths of humility, leadership and zest, and the virtue of justice (Shogren et al., 2017).

In a mixed-method investigation of the impact of character education on seven college students with learning disabilities and/or attention deficit hyperactivity disorder (LD/ADHD), Farmer, Allsopp, and Ferron (2015) posited that although students with LD/ADHD experienced decreased success when compared with their peers without disabilities, these outcomes could improve when students demonstrated the characteristic

of self-determination. Students completed the Self-Determination Student Scale (SDSS) (Hoffman, Field, & Sawilowsky, as cited in Farmer et al., 2015) and participated in an 8-week program that taught them to identify and use their strengths to achieve weekly goals related to academic courses. Although visual analysis and non-parametric effect sizes indicated that there was little to no intervention effect related to participation in the character education program, the participants' interpretation of time series data, pre- and post-assessments of SDSS, and the longitudinal qualitative trend analysis of self-determination behaviors indicated that there was a treatment effect (Farmer et al., 2015).

Park and Peterson (2008) stated that building and enhancing certain strengths was an important strategy of providing protective factors against common youth problems, and the encouragement of character strengths not only made students happier, healthier, and more socially connected but also helped them attain better grades. According to Park and Peterson (2008), focusing on students' character was therefore not a luxury but a necessity. These findings by Park and Peterson (2008) had significant implications for school counselors and others concerned with promoting positive youth development. For example, according to Park and Peterson (2008), students who already possessed the strengths of perseverance, gratitude, and hope should receive encouragement to use these strengths in their school life and studies. To help those who lacked these strengths, Park and Peterson (2008) said that practitioners should design and implement individual or group programs to develop those strengths. Park and Peterson (2009) indicated that an individualized program for cultivating character based on an individual's character strength profile may be more effective than a general program for everyone; slogans or

banners or school assemblies would not be as effective as instruction via an individualized program.

Character Strengths and Boredom

While there has been an investigation of character strengths and the benefits of related interventions, there were only a few character strengths that have been related to boredom. The character strength of hope was one that associated with boredom in students. Hunter and Csikszentmihalyi (2003) used data from a 5-year longitudinal from 1215 junior and senior high school students from 33 public schools across the country, representing the 6th, 8th, 10th, and 12th grades. Hunter and Csikszentmihalyi (2003) examined youth who exhibited a widespread interest in daily life and compared them to those whose experience was much less optimal. Specifically, Hunter and Csikszentmihalyi (2003) administered an education battery, an interest-bored construct, a friend sociometric form, a career orientation scale, and used experience sampling. These researchers investigated levels of global self-esteem, internal locus of control, and the level of optimism or pessimism, or said in terms of character strengths, hopefulness for the future (Hunter & Csikszentmihalyi, 2003). For each of these constructs, Hunter and Csikszentmihalyi (2003) performed an analysis of covariance controlling for grade, race, and social class. Hunter and Csikszentmihalyi (2003) found that *interested* students reported higher self-esteem than *bored* students regardless of grade, race, and social class. Interested youth were also more likely to believe they originate their actions while the *bored* group showed less personal causation. When envisioning their future, *interested* students felt more hopeful than did the *bored* students. Caucasian and African American students reported feeling greater amounts of optimism than those of Hispanic

or Asian descent, and 8th graders reported less optimism than the other grades. Compared to their *bored* peers, *interested* students believed more in their basic worth, were more confident in their ability to be effective agents in the world, and were more optimistic and hopeful about their future (Hunter & Csikszentmihalyi, 2003).

In a predictive study that used structural equation modeling, Daniels et al. (2009) sampled 669 undergraduate psychology students and hypothesized that students' initial affective experiences would predict goal adoption, goal adoption would predict subsequent emotions, and emotions would predict achievement at the end of the academic year. Analyzing correlation results from a motivated strategy for learning questionnaire and an achievement emotions questionnaire and conducting single confirmatory factor analysis and parceling, Daniels et al. (2009) found that making personal goals to master the course material and content predicted enjoyment and negatively predicted boredom. The adoption of goals related to course performance was unrelated to both enjoyment and boredom. Unlike the findings by Hunter and Csikszentmihalyi (2003), feeling hopeful had no direct effect on boredom but feeling helpless positively predicted boredom and boredom negatively affected final introductory psychology grades (Daniels et al., 2009).

Researchers have studied boredom in relation to personality traits (Culp, 2006; Hunter et al., 2016; Sulea et al., 2015). In a quantitative investigation, Sulea et al. (2015) sampled 255 Romanian college students with a mean age of 21.74 years to examine boredom as a feature of wellbeing in association with personality traits. Sulea et al. (2015) administered five Likert-type scales related to work engagement, boredom, burnout, personality, and need satisfaction at work and conducted two confirmatory

factor analyses and three hierarchical multiple regression analyses. Boredom was positively related to neuroticism, negatively related to conscientiousness, and not related at all to extraversion (Sulea et al., 2015).

Culp (2006) examined boredom proneness with the major dimensions of personality in a sample of 316 undergraduate students and determined that high scores on the External Stimulation scale of the Boredom Proneness Scale (BPS) (Farmer & Sundberg, 1986) were negatively associated with honesty-humility, emotionality, and conscientiousness. Furthermore, high scores on the internal stimulation scale were related to extraversion, conscientiousness, and openness to experience. Consistent with this previous work by Culp (2006), Hunter et al. (2016) used hierarchical multiple regressions to evaluate the role of personality and boredom proneness in the prediction of creativity and curiosity. Hunter et al. (2016) sampled 288 college students with a mean age of 21.70 years with these measures: HEXACO-60 (Ashton & Lee, as cited in Hunter et al., 2016), BPS (Farmer & Sundberg, 1986), a creative personality scale, an interest-type and deprivation-type curiosity scale, and a curiosity and exploration inventory. From correlation and hierarchical multiple regressions analyses, Hunter et al. (2016) found that boredom proneness was negatively correlated with honesty-humility, extraversion, agreeableness, conscientiousness, and openness to experience. Unlike Culp (2006) who found no association, Hunter et al. (2016) found boredom proneness to be positively associated with emotionality. Hunter et al. (2016) also determined that boredom proneness was negatively related to creative personality, interest-type curiosity, and exploration. The negative relationship of boredom proneness to creativity, curiosity,

and exploration was supportive of earlier findings that boredom was negatively correlated with curiosity (Kashdan et al., 2004).

Conclusion

Adebayo (2008) recognized that students preparing for college and careers in the 21st century may feel the negative emotion of academic boredom and reported that there was accumulating evidence which suggested that identification of non-cognitive character dispositions and integration into daily practices was beneficial and worthy of authentic attention. Researchers have indicated that the correlates of good character manifest in students' behavior in their classrooms and result in positive school outcomes (Wagner & Ruch, 2015; Weber et al., 2012). These data prompted the present researcher to address an existing gap in the literature by specifying the relationship between boredom proneness and character strengths and the effect of boredom proneness and character strengths on a cognitive measure of postsecondary college and career readiness. If relationships exist, educators can use the positive psychology principles of character strengths to address student academic boredom and support growth in academic, social, and personal competencies needed for postsecondary success. With an expanded appreciation for the character qualities in communities and across cultures, along with academic excellence, educational leaders may be able to address academic boredom and foster in their students an increased opportunity for life-long happiness and productivity.

Chapter III: Methodology

Researchers who have conducted studies on boredom proneness established the connection between boredom and how boredom negatively affected students in academic settings (Sommers & Vodanovich, 2000). Investigators related boredom proneness to lower educational achievement and performance outcomes (Frenzel et al., 2007; Pekrun et al., 2010, Tze et al., 2016; Vogel-Walcutt et al., 2012). Despite teachers' best efforts to present content standards in meaningful and stimulating ways and students' best use of coping strategies, research has shown that addressing academic boredom remains an immediate concern for educational leaders (Visible Learning, 2018). Examining the connections between boredom proneness and character strengths may help educators discern patterns in students. FitzSimons (2013) and Park et al. (2004b) informed educational leaders that individuals who knew and used their character strengths were happier, higher-achieving, and more apt to endure in the challenges they face in school. The aim of the present investigation was to quantify high school students' boredom propensity and students' top signature character strength, document the existence of associations between these two constructs, explore differences based on gender, grade level, and disability classification, and determine the extent to which boredom proneness levels and top signature character strength predicted GPA.

Research Design

The plan for gathering and analyzing data was based on researcher inquiry about specific differences in the degree of students' boredom propensity and signature character strengths. The researcher wanted to precisely measure and assign numerical values to these variables, which necessitated the utilization of quantitative methodology (Field,

2009). This methodology guided the researcher in the collection and analysis of data related to participants' individual boredom proneness scores and character strengths and supported the analysis of associations between these two variables. The researcher preferred a non-experimental, correlational design in this case because a) the research questions pertained to non-causal relationships between variables, b) there was no manipulation of an independent variable or assignment of participants to treatments or conditions, and c) measurement of variables occurred in the natural setting (Tanner, 2012). The researcher used two electronic surveys as the method to obtain numeric values indicating boredom propensity and character qualities of a random sample of high school students, with the intent of making inferences and generalizing findings to the larger population (Creswell, 2014). The sample was cross-sectional because the researcher took measurements only at one point in time and the sample consisted of students of multiple ages (Field, 2009). Surveys were appropriate for administration because they were concise, brief, and simple to score using statistical methods (Creswell, 2014). Additionally, electronic surveying was advantageous as it reduced the bias of social desirability, which is the tendency to answer questions in a way that others view as favorable (Roberts & Allen, 2015). Not being face to face with participants also reduced experimenter expectancy (Roberts & Allen, 2015) or cognitive bias that can cause researchers to interpret results incorrectly because of the tendency to look for information that conforms to their hypothesis, and overlook information that argues against it. The surveys collected data to make inferences about the population of interest, high school students, at one point in time and were representative snapshots of that population (Lavrakas, 2008).

To identify relationships and investigate differences between scores on the SBPS (Struk et al., 2017) and VIA Youth-96 survey (Park & Peterson 2006), the researcher calculated univariate analysis of variance (ANOVA). For the VIA-Youth-96 survey, the researcher conducted Kruskal-Wallis H tests. To determine whether boredom proneness or character strengths predicted students' academic achievement, the researcher conducted ordinal regression analysis.

Population of the Study

The population in this research was students from two public high schools within the same rural school district in the southeastern portion of the United States. The rationale for selecting students from these schools first included the similar gender, grade level enrollment, and disability proportions of the two schools. Secondly, combining the schools allowed for a larger sample and added validity to the results. The researcher informed all students in the population of the nature of the research project and reiterated the necessity to complete both surveys for use in this investigation. The response rate for signed parental consent forms was 257, which represented 8.4% of the total population. Of these returned parental consent forms, the completion rate for students for both surveys was 59%, and the sample consisted of these 152 participants. Table 1 displays the demographic characteristics of the population and sample.

Table 1

Demographic Characteristics of High School Student Population and Sample

	Population		Sample	
Total	(N = 3046)		(n = 152)	5%
Gender				
Male	(N = 1538)	51%	(n = 55)	36%
Female	(N = 1508)	49%	(n = 94)	62%
Other	(N = 000)	0%	(n = 03)	2%
Grade				
9th	(N = 382)	13%	(n = 25)	16%
10th	(N = 363)	12%	(n = 47)	31%
11th	(N = 380)	12%	(n = 48)	31%
12th	(N = 377)	12%	(n = 32)	21%
Disability				
No IEP	(N =2696)	89%	(n = 73)	48%
IEP	(N = 350)	11%	(n = 79)	52%

Data Collection

Prior to initiating the study, the researcher engaged in a process of communication with the district and school-level administrators. The researcher sent a statement of the problem, research questions, significance of the project, and a methodological overview via email to the district level overseer for review. Upon gaining approval from the district designee (see Appendix A), the researcher made appointments to meet individually for 20 minutes with each school principal. Prior to attending the personal meetings, the researcher emailed each principal an outline of the discussion items for the upcoming meeting (see Appendix B). At the meetings, the researcher followed the identical discussion outline and reviewed the problem statement and research questions with the principals. Also, the researcher reviewed the participant security protocols including the acquisition of parental consent for all participants, anonymity of student responses, and safe storage of data during and post research project. Next, the researcher

reviewed the intended instrumentation, namely the SBPS (Struk et al., 2017) (see Appendix C) and the VIA Youth-96 (Park & Peterson, 2006) (see Appendix D) with each principal and explained the intended process of internet administration. At the close of each meeting, the researcher agreed to provide the district and each school principal a copy of the final project following its official completion. Following district and school-level approval to administer the surveys, the researcher obtained permission to use the SBPS surveys from the author (See Appendix E.). The VIA Youth-96 was open to the public and the researcher indicated this accessibility in the application submitted to the university's Institutional Review Board (IRB). After obtaining approval from the IRB for the project, the researcher obtained the email addresses of the participants' parents, linked to students by name.

The implementation phase of the study began when the researcher emailed the parental consent form (see Appendix F) to explain the purpose and procedure of the research project and to gain parents' informed consent for their high school students to take the SBPS and the VIA Youth-96 surveys. The email clearly stated that there was no penalty for non-participation and specified that participation was voluntary. The researcher presented the consent form to parents via a URL link to a SurveyMonkey form. The form included the following two-step procedure: 1) the parent read a statement of consent and clicked on a checkbox that stated, *I agree* and 2) the parent typed his or her name in a provided space to confirm the agreement. The researcher interpreted these two actions as signifying informed parental consent. The form directed the parent to click *Done* and the completed form forwarded directly to the researcher. If parents did not wish to provide consent, they simply exited the form.

Upon receiving electronic parental consent, the researcher emailed students and provided a URL link to an assent form via SurveyMonkey (see Appendix G). Like the parental consent form, the participant assent form explained the project information and then required the student to click *I agree* to indicate consent to take the SBPS and the VIA Youth-96 surveys. The student then typed his or her name to confirm the agreement. If the student did not complete both fields of information, the student was not able to move forward to the surveys. Students who did not assent to participate in the research project simply exited the form.

When the student showed assent by completing both required fields, a new form page opened, and it solicited demographic information. The participant self-reported data about gender (M/F/O), grade level (9-12), disability classification (Yes/No), and GPA (0.00-5.00). If the participant did not complete all fields of demographic information, the student was not able to move forward to the surveys. If the participants entered all demographic information, the form advanced to present the questions on the SBPS. Once the participant completed the survey questions, the participant clicked *Done* to send responses directly to the researcher's email address. Lastly, the participants clicked on the URL link to the dedicated site provided to the researcher by the VIA Institute (see Appendix H). The participants self-reported their name and date of birth and email address, and then they answered the questions on the VIA Youth-96 survey. When participants completed the VIA Youth-96 survey, they clicked to submit their responses, and the VIA Institute scored the responses and returned the responses to the researcher in an electronic spreadsheet format. The researcher resent the original student email and sent a paper copy of the consent form and surveys with a sealable return envelope to

students who did not respond to the emailed invitation to participate in the study despite parent consent. The researcher manually entered returned student data into SurveyMonkey and VIA Institute databases for analysis.

For both surveys, the researcher collected participant data with identifiers for data analysis and rendered the data anonymous for purposes of reporting. The VIA Institute rendered the data from the VIA Youth-96 survey unidentifiable and retained the data in the non-identifiable form in the VIA Institute database (see Appendix I). Upon the end of the designated testing window, the researcher analyzed the data.

To assess boredom proneness participants completed the eight-item SBPS (Struk et al., 2017) in the present analysis. This instrument was a version derived from the original 28 item BPS (Farmer & Sundberg, 1986) and 12 version BPS-SR (Vodanovich et al., 2005). The SBPS, like prior iterations, was an instrument to capture the general tendency to experience boredom (Craparo, Faraci, Fasciano, Carrubba, & Gori, 2013; Struk, et al., 2015; Vodanovich et al., 2005). High scores indicated a higher tendency to experience boredom. The theoretical background of the SBPS scale considered boredom proneness as a "pathological personality trait significantly and positively associated with depression, hopelessness, loneliness, amotivational orientation, and negatively related to life satisfaction and autonomy orientation" (Craparo et al., 2013, p. 165). This survey provided a measurement of an individual's propensity to experience boredom and demonstrated exceptional reliability and validity in the measure of boredom proneness (Struk et al., 2017).

Students also completed the VIAYouth-96 (Park & Peterson, 2006) questionnaire through a secure and dedicated research site available through the VIA Institute. To

understand the development of character strengths, Peterson and Seligman (2004) identified core components of character and developed a scientifically valid and reliable measure of 24 character strengths and virtues appropriate for diverse cultural and developmental groups. Proposing that character is a multidimensional family of positive traits or individual differences that exist in degrees, manifested in a range of thoughts, feelings, and actions, Park and Peterson (2006) developed the VIA Inventory of Strengths. Park and Peterson (2009) indicated that the VIA model provided a useful vocabulary for talking about character strengths, and Niemiec (2013) concluded that the VIA model is one of the most widely used tools to study character strengths. Dahlsgaard et al. (2005) determined character strengths to be universal across cultures, nations, and belief systems. The original VIA-IS (Peterson & Seligman, 2004) inspired the versions VIA-Youth (Park & Peterson, 2006) and VIA Youth-96 (Park & Peterson, 2006) which was the 96-item inventory used in the present analysis. This survey provided a measurement of an individual's signature strengths of character and demonstrated exceptional reliability and validity in the measure of character strengths (Park & Peterson, 2006).

Analytical Methods

The researcher conducted statistical analyses using the Statistical Package for Social Science (SPSS). To answer research question 1, the researcher conducted a univariate ANOVA. This ANOVA test allowed the researcher to analyze the impact of multiple levels of the independent variable, the VIA Youth-96 top strength on the dependent variable, and the SBPS scores. From this ANOVA test the researcher answered if a) there significant differences between two or more groups and, if so, b)

which groups were significantly different from which, and c) how important these differences were (Tanner, 2012).

The researcher was also interested in whether differences in the dependent or criterion variables of student scores in boredom proneness and top character strength were related to differences in the independent of grade level, gender, and disability classification as specified in the research question 2. There were four groups (9, 10, 11, and 12) for grade level, three groups for gender (male, female, and other), and two groups for disability classification (IEP or no IEP); therefore, the researcher conducted three ANOVAs of the scores for the SBPS survey. In the present analysis, the researcher used the ANOVA test because it allowed the comparison of three groups with one test to determine whether there were significant differences between any two of the groups (Tanner, 2012). Instead of conducting several individual t-tests, the researcher used an ANOVA to reduce the chance of having made at least one Type 1 error (Field, 2009). For the top VIA Youth-96 strength, the researcher conducted the nonparametric Kruskal-Wallis H tests because the data from the survey were ordinal and based on ranks (Tanner, 2012). The researcher wanted to determine if there were statistically significant differences between participants' top character strength and the independent variables of gender, grade level, and disability classification.

Lastly, the researcher wanted to discern the extent to which the predictors, or independent variables of boredom proneness levels, and signature character strengths profiles predicted the criterion, or dependent variable of self-reported GPA for students, as indicated in the research question 3. Thus, the researcher conducted ordinal regression

analyses. Ordinal regression was advantageous in this investigation because the outcome variable of GPA was a ranked measure.

Reliability and Validity

Short Boredom Proneness Scale (SBPS). Farmer and Sundberg (1986) assessed the reliability of the original BPS in two ways. In the pilot study, satisfactory internal consistency for the sample of 233 college undergraduate students was evident ($\alpha = .79$). In subsequent studies, measures of internal consistency of the true-false version of the BPS have typically ranged from .72 to .79 (e.g., Ahmed, 1990; Culp, 2006), and coefficient alphas for the 7-point format have been between .79 to .91 (Dahlen, et al, 2004; Gerritsen et al., 2014; Seib & Vodanovich, 1998). Farmer and Sundberg (1986) also evaluated test-retest reliability in a subsample of 28 males and 34 females by re-administering the BPS one week after the initial testing. Sommers and Vodanovich (2000) indicated that the BPS demonstrated adequate test-retest reliability for both sexes ($r = .83$), and ($r = .79$) after a two-week period.

To assess the validity of the BPS, Farmer and Sundberg (1986) conducted two studies related to self-ratings of boredom and interest. In the first study, responses from 222 college undergraduate students indicated a strong relationship with a composite self-rating score ($r = .67$, $p < .001$), which indicated that one's willingness to label oneself as bored and uninterested or unsatisfied in personal activities is closely related to the BPS. In the second study of 63 undergraduate students, those high in boredom as measured by the BPS identified significantly more boring topics given in two lectures ($r =. 25$, $p < .05$) and were less attentive ($r = -.29$, $p < .005$). For students with a high propensity toward boredom, this was evidence suggestive of less interest and

involvement in classroom proceedings. In a third study, the developers checked for correlations with other boredom measures. From the sample of 233 college undergraduate students used for the basis of the BPS (Farmer & Sundberg, 1986), 49 males and 92 females took the Boredom Susceptibility Scale (ZBS) (Zuckerman, Eysenck, & Eysenck, 1978) and 22 males and 20 females took Lee's Job Boredom Scale (JBS) (See, cited in Farmer & Sundberg, 1986). Although the BPS (Farmer & Sundberg, 1986) revealed a satisfactory relationship with JBS ($r = .49$, $p < .001$), the researchers found only a weak relationship with ZBS ($r = .25$, $p < .01$). Investigation also revealed moderate correlations between the BPS and other constructs such as the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), the Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974), the UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978), and the Life Satisfaction Index (Neugarten, Havinghurst, & Tobin, as cited in Farmer & Sundberg, 1986).

Since its development, scores on the BPS have linked to an array of variables, providing data relevant to its validity (Vodanovich & Watt, 2016). Construct validity of the scale has been determined through significant, positive correlations with negative affect. High boredom proneness as measured by the BPS (Farmer & Sundberg, 1986) has been associated with negative affect such as lack of self-awareness (Seib & Vodanovich, 1998), anger (Dahlen et al., 2004; Rupp & Vodanovich, 1997), anxiety (LePera, 2011), depression (Farmer & Sundberg, 1986; Goldberg et al., 2011; Mercer-Lynn et al., 2014; Sommers & Vodanovich, 2000; Vodanovich, 2003), and neuroticism (Mercer-Lynn et al., 2013). Hunter et al. (2016) found that boredom proneness was negatively associated with the personality traits of honesty-humility and curiosity, and positively related to

emotionality. Culp (2006) also used the BPS (Farmer & Sundberg, 1986) and found negative correlations with honesty-humility and conscientiousness. Malkovsky et al. (2012) investigated boredom proneness with the BPS (Farmer & Sundberg, 1986) and implicated boredom proneness in attention lapses and difficulty sustaining attention.

According to Vodanovich et al. (2005), a shortcoming of the BPS (Farmer & Sundberg, 1986) was the lack of consensus regarding the number and type of factors that comprise the instrument. Soon after the development of the BPS (Farmer & Sundberg, 1986), factor analysis studies concluded that the scale possessed between two and five factors (e.g., Ahmed, 1990; Vodanovich & Kass, 1990). From a sample of Canadian students, Ahmed (1990) determined that two factors, labeled as Apathy and Inattention, were present on the BPS (Farmer & Sundberg, 1986). Vodanovich and Kass (1990) administered the BPS (Farmer & Sundberg, 1986) to 385 college students from the United States and concluded that it was comprised of the following five factors: External Stimulation, Internal Stimulation, Affective Responses, Perception of Time, and Constraint. Vodanovich and Kass (1990) suggested that the external factor assessed an individual's inability to satisfy a high need for excitement, challenge, and change whereas the internal factor assessed one's inability to self-generate interest and engagement. Vodanovich et al. (2005) sampled 787 adults with a mean age of 28.5 years who were employed in a variety of occupations (e.g., office work, labor, real estate, finance, self-employed). Vodanovich et al. (2005) added clarity to the dimensions of the BPS (Farmer & Sundberg, 1986) by performing confirmatory factor analysis, and the factors of External Stimulation and Internal Stimulation emerged. Specifically, the BPS (Farmer & Sundberg, 1986) items on the External Stimulation subscale reflected the need

for variety and change, whereas the Internal Stimulation subscale referred to a perceived inability to create adequate stimulation for one's-self (Vodanovich et al., 2005). Vodanovich et al. (2005) then created a shorter, 12-item version of the scale, the Boredom Proneness Scale–Short Form (BPS-SR), which consisted of these two factors with six items from the original scale contributing to each factor.

Struk et al. (2017) investigated the factor structure and validity of both the BPS and the BPS-SR and determined that the two-factor solution obtained for the BPS-SR was an artifact of item wording of reverse-scored items. After modifying problematic reverse-scored items, Struk et al. (2017) identified a core set of items yielding a "single factor solution and a scale that appears to reflect a single dimension of boredom proneness" (p. 11) and subsequently developed the eight-item SBPS. To test the construct validity of the new scale, whether it continued to demonstrate the relationships observed with the full scale, Struk et al. (2017) assessed the relationship between the SBPS, measures of anxiety, depression, aggression, and stress, as well as attention variables such as ADHD symptoms, spontaneous mind-wandering, and lapses of attention. Struk et al. (2017) found that the new scale was appropriately and significantly correlated with those measures and thus had good internal consistency and construct validity comparable to the original BPS score. Analysis of the new eight-item SBPS provided good evidence of unidimensionality and its score as an exceptionally reliable and valid measure of boredom proneness (Struk et al., 2017). The present investigation used this updated SBPS version of the full BPS, including the recommended five-point Likert-style scale for scoring.

Values In Action Youth-96 survey (VIA Youth-96). For the assessment of character strengths in children and adolescents, Park and Peterson (2006) created a VIA-Youth survey and the VIA Youth-96. The VIA-Youth was an adaptation of the VIA-IS that has undergone "considerable psychometric testing by its authors, who purport it to possess reliable internal consistency, stability, and validity" (Toner et al., 2012, p. 637). Park and Peterson (2006) developed and pilot-tested 198 items with a sample of 119 fifth grade and 131 eighth grade public school students and each subscale showed good internal consistency. These students had completed a version of the VIA-Youth six months earlier and even though the tests were not identical, test-retest correlations ranged between .46 (teamwork) and .71 (religiousness) and showed a median of .58 across the 24 scales, suggesting good stability of the measures of character strength (Park & Peterson, 2006). In a sample of 1569 German children and adolescents with a mean age of 14.26, Ruch, Weber, Park, and Peterson (2013) determined the median test-retest reliability for the 24 scales was .72. The VIA-Youth used a five-point Likert-style format (from 1 = *not like me at all* to 5 = *very much like me*). The means of all subscales were above the midpoint (3 = *somewhat like me*) and the variability was acceptable. In an investigation by Weber and Ruch (2012) the internal consistencies of the 24 scales showed a median of $\alpha = .77$. McGrath and Walker (2016) sampled 23,850 young people between ages 10 and 17, and coefficient alphas for the 24 VIA-Youth scales varied between .70 and .91. The VIA-Youth thus verified to be a reliable and valid measurement (e.g., Park & Peterson, 2006; Ruch et al., 2013; van Eeden, Wissing, Dreyer, Park & Peterson, 2008).

Correlation with related paradigms has established the construct validity of the VIA-Youth subscales. In adults, the character strengths of hope, zest, gratitude, love, and curiosity robustly associated with life satisfaction (Park et al., 2004a; Peterson & Seligman, 2006). Park and Peterson (2006) found similar associations for youth; hope, love, gratitude, and zest robustly linked to life satisfaction. The VIA-Youth scales have also yielded significant correlations with global self-worth, social acceptance, and adaptive functioning (Dahlsgaard et al., 2005). Through factor analysis of the VIA-IS, researchers have found and replicated four factors: temperance, intellectual, transcendence, and interpersonal strengths (Park & Peterson, 2006; Peterson & Seligman, 2004). Subsequent studies have, however, identified two factors called leadership (Gillham et al., 2011) or vitality (Toner et al., 2012) that have not emerged in factor analyses of adults (McGrath & Walker, 2016).

The instrument used in the present investigation was the VIA Youth-96 (Park & Peterson, 2006), an abbreviated version of the VIA-Youth consisting of 96 items. Each scale was comprised of the four items from the VIA-Youth scale with the highest corrected item-total correlations and 5 five of the 55 reversed-keyed items met inclusion criterion. Correlation with the long form of the VIA-Youth was .84 on average across scales. Based on these findings, the VIA Institute recommended this 96-question version as it is more efficient and considered to be as valid as the longer version. Coefficient alphas for the 24 VIA Youth-96 scales varied from .69 (social intelligence) to .95 (spirituality). To evaluate consistency between the two measures, the VIA Institute used a sample of 253 teens who completed the VIA-Youth and found that the mean correlation between original and revised character strength scales was .82.

Limitations and Delimitations

The empirical results reported herein were subject to limitations related to the design of the study, the sample, and the timing of implementation. The first limitation concerned the non-experimental design of the study; because the researcher did not assign participants to treatment groups or manipulate the variables of interest, the researcher was unable to make more statistically rigorous causal inferences. Also, because the researcher was interested in quantifying the levels of boredom propensity and describing signature character strengths of the participants, the researcher ascertained no subjective experiences about *why* participants experienced boredom or *how* character strengths developed, thus limiting the depth of information gathered.

A secondary design-related limitation was in the use of self-reported measures; due to confidentiality of protected information the researcher did not have access to the official records. Also, the conscious or unconscious desire of participants to report socially desirable or accepted experiences as opposed to answering truthfully may have occurred and influenced responses. Further, the participants may have had limited introspective ability; they may not have been able to assess themselves accurately or may have had difficulty interpreting the wording of the survey questions. Also, respondents may have considered the Likert-type rating scales as imprecise, or they may have been inclined to give either an extreme or middle response to all questions.

There was also a key limitation within the sample. Bias within the sample may have existed; participants who completed the self-report surveys may have not been fully representative of the entire student population. For instance, those who were highly

prone to boredom may have opted not to participate, or, those who were higher in certain character strengths may have been more inclined to participate than others.

In the present study, delimiting factors included the choice of problem, the research questions, population, variables of interest, instrumentation, and theoretical perspective. To begin, the researcher chose academic boredom as the problem of investigation due to the prevalence and universality of the experience of academic boredom, along with its negative impact on student achievement. The issue of boredom in high school students may be relevant for variety of aims, such as assessing a new learning tool or delivery technique; however, such an emphasis would not have satisfied the objective of the present investigation which was to add to the gap in extant literature concerning connections between boredom and character and academic achievement.

The next delimiting factor was the research questions, which specifically allowed the generation of quantitative data. The researcher was not interested in participants' views about, for example, why school is boring or the qualities they subjectively felt or believed to be representative of their personal strengths, and therefore the researcher did not adopt a qualitative design or methodology.

Delimitations of the investigated population included the parameters of only selecting high school participants and only those enrolled in either of two high schools in the rural, southeastern school district. The generalization of findings to other populations was beyond the scope of the present study. Another delimitation was the researcher's choice of the predictor variables of grade level, gender, and disability classification, which were relevant to the interest in examining demographic differences between students. Although potentially informative, for reasons of practicality, the researcher did

not examine variables such as level of participation in extra-curricular activities or student discipline data. To support reliability and validity of the present findings, the researcher also delimited boredom proneness and signature character strengths instrumentation in the present study to the inclusion of closed-ended, Likert-style questions as indicative of the SBPS (Struk et al., 2017) and the VIA Youth-96 (Peterson & Seligman, 2006).

The timing of instrument administration was another delimitation of the present study. The researcher opted for a testing window of one month during the final quarter of the academic year. During this time students in year-long classes had been studying the same academic content for an entire year. Also, during this final quarter, there was a district-wide emphasis on preparation for mandatory state testing.

Lastly, the current theoretical framework included concepts of positive psychology and strengths-based approaches, which excluded prior stated theories of boredom such as those related to perceived relevance or value of the subject matter taught, or regarding one's personal level of control and goal mastery. Although there have been a variety of strategies to cope with boredom already defined, this researcher did not include them because, despite general awareness of these strategies, their effectiveness in reducing boredom has been questionable, as continued prevalence of academic boredom remained.

Assumptions of the Study

The researcher designed the current investigation around several assumptions critically related to the conditions of the study and considered as true and necessary for the study to be valid. The first assumption formed the basis of the investigation and

maintained that the experience of academic boredom was a universal phenomenon experienced by people of all ages and ethnic groups in various educational settings. Documentation of this reality existed in the extant literature (e.g., Cui et al., 2017; Preckel et al., 2010; Tze et al., 2016). Ancillary assumptions were that academic boredom was a prevalent occurrence (Pekrun et al., 2014) and the propensity to experience boredom was associated with negative effects on achievement (Daniels et al., 2015; Frenzel et al., 2007; Pekrun et al., 2010; Vogel-Walcutt et al., 2012). Another fundamental assumption of the present study was that character was a quantifiable (Peterson & Seligman, 2004) and distinctly individualized construct (Park, 2009), which existed in degrees or along a continuum (Park & Peterson, 2009). Also assumed in the present study was the existence of an association between boredom and specific character strengths (Culp, 2006; Hunter & Csikszentmihalyi, 2003; Hunter et al., 2016; Kashdan et al., 2004; Sulea et al., 2015). Two final assumptions made by this researcher were related to the participants in the sample. This researcher assumed that the participants had experienced boredom in academic settings at least once in their schooling history and that the participants knew about their own personal character qualities well enough to make judgments about them. Relatedly, this researcher held the convictions that the participants had a sincere interest in participating in the research and had no other motives such as getting a better grade or another extrinsic reward. Furthermore, this researcher assumed participants were not under pressure to respond in a prescribed way on the self-report surveys and contributed honest responses to both them and demographic information.

While this researcher made efforts to ensure equal opportunity for students to participate in the current research, a bias of selection may have occurred as subjects engaged in the process of self-selection. In other words, the students volunteered to participate and, thus, certain individuals may have deselected themselves because of the variables under investigation. For example, those students who had a high propensity toward boredom may have perceived participation in the surveys as boring and, therefore, not engaged in the survey process. Similarly, having begun to answer the questions on the survey, some students may have been more inclined to quit responding prior to survey completion. The same bias may have held true with students who possess certain character strengths. For instance, those students who ranked lower in perseverance may not have demonstrated the ability to persist through the survey questions to the end. Another potential respondent bias may have been that of habituation, especially as related to the VIA Youth-96. In this case, because the self-report may have taken up to 30 minutes to complete, respondents may have experienced signs of fatigue and, thus, provided the same answers to related items, or they may have opted to choose responses with the same Likert-value for multiple questions rather than differentiating their responses. An additional source of bias may have included the researcher. The experience of working with at-risk and special needs youth may have influenced this researcher to adopt a choice of theoretical frame underpinned by positive psychology and strength-based approaches to achievement interventions. This researcher mitigated this bias by using valid and reliable instruments and quantitative design.

Chapter IV: Analyses and Results

Boredom proneness in academic settings was the problem under investigation, and the researcher was interested in whether students' top character strength made a difference in students' boredom propensity. Further, the researcher wanted to discern if there were differences in student's boredom propensity and top character strength based on gender, grade level, and disability classification. Lastly, in the present study, the researcher examined if student's boredom propensity or top character strength were predictive of student's achievement as measured by self-reported grade-point average.

Data Analysis

To investigate the relationship of boredom proneness and character strengths as indicated in research question 1, the researcher conducted an ANOVA and used an alpha level of .05 for hypothesis testing. Through use of the ANOVA test the researcher analyzed the impact of multiple levels of the independent variable, the VIA Youth-96 top strength, on the dependent variable, the SBPS scores. The researcher was also interested in whether differences in the dependent or criterion variables of student scores in boredom proneness and top character strength were related to differences in the independent variables of grade level (9-12), gender (male, female, or other), and disability classification (IEP or no IEP); therefore, to address research question 2, the researcher conducted three ANOVAs of the scores for the SBPS survey and used an alpha level of .05 for hypothesis testing. Lastly, the researcher wanted to discern the extent to which the predictors or independent variables of boredom proneness levels and signature character strengths profiles predicted the criterion, or dependent variable of self-reported GPA. Students selected their GPA from a range of intervals which resulted

in ranked data instead of an actual GPA score. Thus, to address research question 3, the researcher conducted ordinal regression analyses and used an alpha level of .05 for hypothesis testing.

Research Questions

Research question 1. Based on data from the Short Boredom Proneness Scale and the Values in Action Youth-96 survey, what was the difference, if any, in boredom proneness levels and top signature strength for students in grades 9-12 from two high schools in a rural southeastern school district?

Since Level's test of equality of variances was met ($F = 1.700$, $p = .058$), the researcher conducted a one-way ANOVA to examine differences in students' boredom proneness, based on the students' top character strength. The researcher determined there was a statistically significant difference between the top character strengths ($F = 2.259$, $p = .007$). Participants' top character strength accounted for 20.6% of the variance in Boredom Proneness. Analysis of Tukey's Post Hoc test revealed several differences. There was a significant difference ($p = .007$) between the character strengths of humility and bravery; participants whose top character strength was humility ($M = 4.458$) scored higher in boredom proneness than participants whose top character strength was bravery ($M = 2.325$). Also, there was a significant difference ($p = .034$) between the character strengths of humility and prudence; participants whose top character strength was humility ($M = 4.458$) scored higher in boredom proneness than participants whose top character strength was prudence ($M = 2.482$). Lastly, there was a significant difference ($p = .007$) between the character strengths of humility and curiosity; participants whose

top character strength was humility ($M = 4.458$) scored higher in boredom proneness than participants whose top character strength was curiosity ($M = 2.214$).

Descriptive statistics revealed that 5% of the sample scored low in boredom proneness. Data also exposed that 64% or six of 10 students scored in the medium range of boredom proneness, and 31% or three of 10 students scored in the high range of boredom proneness. Fully, 95% or 9 of 10 of students sampled were either moderately or highly prone to boredom. Regarding participants' top character strength, the highest three strengths indicated in the sample were gratitude (15%), appreciation of beauty and excellence (14%), and love (10%). None of the participants in the sample had the character strengths of perspective, social intelligence, or zest as their top strength.

Research question 2. Based on data from the Short Boredom Proneness Scale and the values in Action Youth-96 survey, how, if at all, did scores from students in grades 9-12 from two high schools in a rural southeastern school district vary by grade level, gender, and educational disability classification?

Regarding boredom proneness, Levene's test of equality of variances was met ($F = .747$, $p = .467$), and the researcher conducted a one-way ANOVA to examine differences in students' boredom proneness based on the students' gender. The researcher concluded there was no statistically significant difference in boredom proneness based on participants' gender ($F = .791$, $p = .455$). Gender accounted for 1.1% of the variance in boredom proneness.

Regarding boredom proneness and grade level, Levene's test of equality of variances was met ($F = 1.339$, $p = .264$), and the researcher conducted a one-way ANOVA to examine differences in students' boredom proneness based on the student's

grade level. The researcher concluded there was no statistically significant difference in boredom proneness based on participants' grade level ($F = .849$, $p = .469$). Grade level accounted for 1.7% of the variance in boredom proneness.

Regarding boredom proneness and disability classification, Levene's test of equality of variances was met ($F = 3.372$, $p = .068$), and the researcher conducted a one-way ANOVA to examine differences in students' concluded there was no statistically significant difference in boredom proneness based on participants' disability classification ($F = .597$, $p = .441$). Disability classification accounted for .4% of the variance in boredom proneness.

For character strengths, the researcher conducted a Kruskal-Wallis test to examine differences in students' top character strength and gender. The researcher concluded there was no statistically significant difference in top character strength based on participants' gender ($\chi^2(2) = 2.904$, $p = .234$). The distribution of participants' top signature strength was the same across categories of gender.

For character strengths and grade level, the researcher conducted a Kruskal-Wallis test to examine differences in students' top character strength and grade level. The researcher concluded there was no statistically significant difference in top character strength based on participants' grade level ($\chi^2(3) = 2.289$, $p = .515$). The distribution of participants' top signature strength was the same across categories of grade level.

For character strengths and disability classification, the researcher conducted a Kruskal-Wallis test to examine differences in students' top character strength and disability classification. The researcher concluded there was no statistically significant difference in top character strength based on participants' disability classification

($\chi^2(1) = 2.493$, $p = .114$). The distribution of participants' top signature strength was the same across categories of disability classification.

Research question 3. Based on data from the Short Boredom Proneness Scale and the Values in Action Youth-96 survey, to what extent did boredom proneness levels and top signature character strength predict grade point average (GPA) for students in grades 9-12 from two high schools in a rural southeastern school district?

For boredom proneness, the researcher conducted ordinal regression and found that the model was a good fit ($p < .01$); Pearson goodness of fit indicated that the model was not a good fit ($\chi^2(58) = 79.54$, $p = .032$). Boredom accounted for 36.2% of the variance in GPA. Test of Parallel Lines assumption of proportional odds was met ($\chi^2(58) = 62.26$, $p = .327$). Parameter estimates, however, informed the researcher that there was no statistically significant data to indicate that boredom proneness scores predicted participants' GPA. The researcher concluded boredom proneness did not predict participants' GPA.

For top character strength the researcher conducted ordinal regression and found that the model was not a good fit ($p = .683$); Pearson goodness of fit indicated that the model was a good fit ($\chi^2(6) = 3.075$, $p = .799$). Top character strength accounted for 1.1% of the variance in GPA. Test of Parallel Lines assumption of proportional odds was met ($\chi^2(6) = 3.318$, $p = .768$). Parameter estimates informed the researcher that there was no statistically significant data to indicate that top character strength predicted participants' GPA. The researcher concluded top character strength did not predict the participants' GPA.

Summary of Results

A chief exploratory aim of the researcher was to determine if there was a difference in boredom proneness levels based on participants' top character strength. Results indicated that students' top character strength made a difference in students' boredom proneness levels. Specifically, the data revealed significant differences in boredom proneness levels between the character strengths of humility and bravery, humility and prudence, and humility and curiosity. Participants' who had a top character strength of humility scored higher on boredom proneness than those participants for whom bravery, prudence, or curiosity was the top character strength.

The researcher was also interested in whether differences existed in the level of boredom proneness based on participants' gender, grade level, or disability classification. Results confirmed that there were no differences in participants' boredom proneness level based on gender, grade level, or disability classification. Further, there were no differences in participants' top character strength based on participants' gender, grade level, or disability classification. Regarding the ability to predict students' self-reported GPA, the researcher found that participants' level of boredom proneness was unable to predict participants' GPA. Results also confirmed that participants' top character strength was unable to predict participants' GPA. Student success, as measured by GPA, was unaffected by either participants' boredom proneness level or top character strength.

Chapter V: Conclusions and Recommendations

Students experience a range of emotions while in school, and these emotions have an impact on achievement. Research has confirmed a plethora of negative effects of academic boredom on students' achievement (Frenzel et al., 2007; Pekrun et al., 2010; Tze et al., 2016; Vogel-Walcutt et al., 2012). The emotional experience of boredom within the classroom negatively affects students' use of learning strategies (Pekrun et al., 2018) and performance outcomes (Tze et al., 2016). The emphasis of the present investigation was on student susceptibility to academic boredom, with the understanding that those individuals with the trait of high proneness to boredom more readily experience the actual state of boredom throughout their school day. Those who possess the trait of high susceptibility to boredom are also at risk of problems such as anger (Dahlen et al., 2004), anxiety (LePera, 2011), and depression (Mercer-Lynn et al., 2014).

Some students may experience the negative emotion of academic boredom even in high-quality classrooms (Daschmann et al., 2011). Efforts by teachers to prevent academic boredom have been unsuccessful (Pekrun et al., 2010) as have attempts to reduce boredom through manipulation of the learning environment or provision of choices about curriculum content (Wang et al., 2017). Thus, the present investigation adopted a novel perspective and focused on the positive dispositional features of the individual as related to boredom propensity. The current study shed light on high school students' strengths of character in relation to boredom proneness, as strength-based interventions can decrease negative emotions (Seligman et al., 2005) and improve students' emotional and academic functioning (Furlong et al., 2009).

Discussion and Conclusions of the Study

Through this study the researcher established evidence that confirmed the widespread nature of academic boredom and clarified several relevant truths about the character strengths of the students who tend to readily experience academic boredom. Current findings of moderate or elevated levels of boredom proneness in 9 of 10 students confirmed prior reports that academic boredom proneness is an acute emotion in achievement settings (e.g., Macklem, 2015; Pekrun et al., 2002). According to present interpretation, the majority, as many as 95% of high school students were either moderately or highly prone to academic boredom. This proportion was greater than the 40% to 60% chronically disengaged high school students found by Klem and Connell (2004). Those students who were low in boredom proneness were the minority group in the present analysis; moderate or elevated levels of proneness academic boredom was the relative norm for high school students. Present findings informed educational leaders that academic boredom remains a prevalent and pervasive problem; six out of 10 high school students were moderately prone to boredom and three out of 10 high school students were highly susceptible to experiencing academic boredom.

Although most high school students were moderately or highly prone to boredom, the present study next specified that there were no discernible differences in high school students' propensity to experience boredom based on gender. Among males, females, and other-gendered students, there was a normal distribution of individuals who scored low in proneness to boredom as well as moderate or high proneness levels. Present findings indicated that there was no specific gender category of high school students who were more, or less, prone to boredom than students from the other gender categories.

High school students within each gender category experienced boredom proneness to different degrees. These conclusions differed from Vodanovich et al. (2011), who found that undergraduate male students were more highly prone to boredom and Jaradat (2015), who found that Jordanian undergraduate females had significantly higher scores on external stimulation boredom scales than males.

Another conclusion offered here was that there were no discernible differences in high school students' propensity to experience boredom based on grade level. High school freshman, for example, who were newly beginning their academic training for college or career were just as likely to be prone to academic boredom as senior students who had completed lengthy and rigorous programs of study to meet graduation requirements. In contrast to Brenneman (2016), who indicated that boredom may reach its peak in students' junior year, there was no specific grade level of high school students who were more, or less, prone to boredom than students from the other grade levels. While Brenneman (2016) showed that the negative effects of academic boredom such as lowered engagement level become more pronounced as students' advance through the required curriculum, the present investigation confirmed that the problem of academic boredom proneness was experienced to differing degrees by students at each grade level. Students within each grade level in high school experienced boredom proneness to different degrees.

The current study confirmed an additional reality about academic boredom. There were no obvious differences in high school students' propensity to experience boredom based on disability classification. Among high school students with or without disability classification, there was a normal distribution of individuals who scored low in

proneness to boredom as well as moderate or high proneness levels. Present findings indicated that there was no specific group, disabled or non-disabled, who were more, or less, prone to boredom than students from the differing disability category. High school students within each disability category experienced boredom proneness to different degrees.

In operational terms, educators can appreciate the confirmation that most high school students enrolled in public education classrooms experience boredom proneness to a moderate or elevated level, regardless of their gender, grade, or disability. By using the principles of positive psychology and comparing patterns of intrinsic character strengths and boredom propensity levels in students, the current research highlighted an additional certainty; there was a notable difference in the degree to which high school students experienced boredom proneness, based on their top character strength. High school students' whose top character strength was humility were more highly prone to boredom than students whose top-ranked character strengths were bravery, prudence, or curiosity. Said another way, students with the top-ranked character strengths of bravery, prudence, and curiosity were less boredom prone than students who ranked highest in humility. The association between high boredom proneness and humility had heretofore been a negative one as measured in undergraduate students (Culp, 2006; Hunter et al., 2016) and current conclusions may not generalize beyond high school students. The present findings were supportive, however, of the previous conclusion that university students who were highly curious tended to be less prone to experiencing boredom (Kashdan et al., 2004).

The present investigation also allowed for the conclusion that participants' boredom proneness levels were not able to predict academic achievement for high school students, as measured by the student self-reported GPA. For example, high school students with low GPAs were equally likely to show a varied range of boredom proneness levels as students with high GPAs. In studies involving undergraduate college students, however, Castens and Overby (2009) concluded that boredom proneness is predictive of GPA. Also, Jaradat (2015) investigated boredom proneness in Jordanian undergraduate students and determined that low achieving students had significantly higher boredom proneness scores than high achieving students.

The present inquiry further indicated that there were no specific character strengths that foretold the level of achievement for high school students. Prior studies, however, have indicated that character strengths can predict GPA. Park (2009) indicated that the character strengths of perseverance, love, gratitude, honesty, hope, and perspective predicted an end-of-year GPA for middle school students. Weber and Ruch (2012) found that the character strengths of the mind (e.g., self-regulation, perseverance, love of learning) were predictive for middle school students' success, as measured by GPA. Shoshoni and Sloan (2013) found that intellectual and temperance strengths were predictive of school adjustment as measured by GPA for Israeli middle school students. Among college students, Lounsbury et al. (2009) found that the character strengths of persistence, open-mindedness, self-regulation, love of learning and prudence correlated with self-reported GPA.

Implications for Practice

Emotions can facilitate or impede students' academic engagement and ultimate school success, and therefore the negative emotion of academic boredom as an aspect of the educational process requires attention from educational leaders for the benefit of all students. Students' learning motivation and emotions have long been a focus in educational research (Daniels et al., 2009), and boredom experienced in academic contexts has been shown to be a debilitating emotion adversely influencing students' educational development (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Pekrun, Hall, Goetz, & Perry, 2014) and academic attainment (Pekrun et al., 2010). Of the many factors that influence student achievement, boredom ranked as the third most detrimental (Visible Learning Plus, 2018). As negative emotion, boredom reduced motivation, attention, and processing of information (Mikulas & Vodanovich, 1993; Pekrun, Goetz, Titz, & Perry, 2002).

The present study was a preliminary investigation into differences in boredom proneness and character strengths in adolescent high school students and the ability of boredom proneness scores and character strengths to predict academic achievement. The present perspective of investigating proneness to boredom from a viewpoint of personal character strengths was agreeable with trends that showed a growing interest in the study of strengths as a holistic factor affecting wellbeing (Biswas-Diener, Kashdan, & Minhas, 2011; Seligman & Csikszentmihalyi, 2000). It is possible, however, that present results would vary in different student populations, with different measures of academic success and with use of participants' complete signature character strength profile as opposed to

solely their top strength. Nonetheless, current research inspired several actionable suggestions for future practice.

Of foremost concern for educators are present findings indicating that one-third of all high school students are highly prone to boredom, regardless of their gender, grade level, or disability classification. The prevalence and pervasiveness of elevated academic boredom proneness among students tell educational leaders' critical information about the general emotional state of the high school student population. Many students are at risk for experiencing boredom and relatedly, many students may also be experiencing anger, anxiety, and depression. If administrators collected boredom proneness scores from all high school students, diagnosticians could compare the emotional climate of schools within and between districts. Educational leaders could then take steps to determine the operational antecedents of existing differences, with the goal of improving students' emotional experiences while in school.

Further, school personnel could improve current practice by using boredom proneness data to proactively screen for associated emotional problems in students. Although school psychologists and other mental health personnel in schools do not have a history of either assessing or providing interventions for boredom in schools (Macklem, 2015), school psychologists could, for example, use data from those students deemed high in boredom as an indicator to test for the correlated conditions of anger, anxiety, and depression among students. Clinicians should also measure boredom proneness in those students identified with ADHD, as prior research has confirmed the relationship between boredom proneness and ADHD (Fahlman, Mercer-Lynn, Flora, & Eastwood, 2013; Malkovsky et al., 2012). This proactive approach to student emotional health may

enhance funding for initiatives pertaining to the school's wellness plans. Additionally, guidance counselors could flag, in the school's attendance database, students who score high on boredom proneness to alert teachers and administrators to student tendencies potentially detrimental to academic achievement. When addressing student behavior problems or other referrals, administrators could consider student boredom proneness scores as a potential contributory factor to mediate discipline.

At its core, high school education is about nurturing the skills and strengths needed for students' successful transition to college or career. According to Park and Peterson (2008), counselors should start to measure students' assets such as character strengths as much as their deficits. Research studies of the effects of positive psychology character strength interventions implemented in classrooms have yielded promising results, in terms of both student wellbeing and academic outcomes (Shankland & Rosset, 2017). In the USA, most states mandate or encourage character education, and many have standards related to social and emotional learning (Seligman et al., 2009) along with traditional academic standards. A secondary application of present findings then is to administer a comprehensive character strength assessment to all students, with the aim of encouraging students, especially those highly prone to boredom, to actively identify and practice their strengths to mitigate the negative effects of academic boredom.

There are many kinds of activities and interventions to increase positive psychological outcomes based on character strengths (see, for example, Linley & Joseph, 2006; Seligman, Steen, Park, & Peterson, 2005). Durlak et al. (2011) reassured school leaders that they can easily incorporate character strength programs and interventions into routine practices at all educational levels, in urban, suburban, and rural schools, without

the need for additional personnel. Teachers of all disciplines can adopt the dynamic approach of encouraging students to practice individual strengths in relation to, for example, academic or socio-emotional competencies required to evidence mastery of course content. Special education case managers can use students' character strengths information to supplement assessments of academic performance and transition goals within individualized education plans. Using students' character strength profiles, administrators can incorporate individualized character-based interventions when addressing students' behavioral concerns. To assist students with the transition to post-secondary settings, guidance counselors could record character strengths information into students' cumulative files and encourage students to highlight use of their strengths on college applications and career resumes.

It requires a deliberate effort to develop a generation of young adults prepared to manage the mounting complexities of life beyond high school and capable of taking on the emerging challenges of the 21st century as global citizens. Among the important challenges for educational leaders is to recognize and respond to academic boredom, which can negatively impact high school students' ability to acquire the knowledge that will help them effectively transition to postsecondary education and a successful career. If susceptibility to boredom in educational settings goes unchecked, it can restrict students' ability to achieve their academic potential with lasting negative consequences (LePera, 2011; Nett et al., 2010; Pekrun et al., 2010). Operational strategies for reducing academic boredom have had limited success in the school setting and academic boredom continues to be among the most detrimental influences on student achievement (Visible Learning Plus, 2018).

Current findings confirmed that most high school students experience moderate to high proneness to boredom regardless of their gender, grade level, or disability classification. Identifying and understanding students' character strengths provides educators and leaders with an important base for individually tailoring interventions to address susceptibility to boredom. The character strength of humility, as compared to bravery, prudence, and curiosity, emerged as an indicator of elevated boredom proneness in high school students. To improve our understanding of the connection between academic boredom proneness and character strengths and their impact on academic achievement, practitioners can continue to inform extant literature through an analysis of boredom proneness levels before and after the implementation of character strength programming. Character strengths play important roles in positive youth development, not only as broad protective factors to preventing or mitigating psychopathology and problems but also as enabling conditions that promote thriving and flourishing (Park & Peterson, 2008).

Boredom has been one of the most common and debilitating emotions reported by students (Frenzel, Pekrun, & Goetz, 2007; Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010; Tze, et al., 2016; Vogel-Walcutt, Fiorella, Carper, & Schatz, 2012), and there is a need to be able to diagnose proneness to boredom and to implement intervention programs that teach students how to cope with boredom adaptively, thus ultimately reducing boredom in school. Ongoing attention from educational leaders to students' emotional susceptibility to academic boredom through the lens of positive psychology can lead to a clearer understanding of the relationship of individual strengths of character to boredom proneness. It will be valuable for future research to continue to identify

strengths that are most strongly linked to academic boredom proneness. With the ongoing investigation of the association between academic boredom proneness and character strengths, educators may develop new and innovative strength-based strategies to address academic boredom proneness, and support students' growth in academic and personal competencies needed for postsecondary success.

Recommendations for Future Research

For decades, the educational system that guides the development of skills and abilities for a successful transition to college and career has left many adolescents uninspired (Csikszentmihalyi et al., 1993). Academic boredom is so common that many have considered it a normal phase of growing up (Hunter & Csikszentmihalyi, 2003). For educational researchers and leaders then, the present revelation of moderate or high proneness to academic boredom for most high school students serves as a call to continue investigating this pervasive emotional tendency. The inclusion of corroborative assessment methods such as teacher and parent observations of student boredom along with student self-report of boredom through qualitative interviews or other boredom proneness measures would enhance future research. Based on the prevalence of students with moderate or high boredom proneness as indicated in the present study, there is implication that a proportional number of high school students are regularly at risk of co-occurring emotional problems such as anger (Dahlen et al., 2004), anxiety (LePera, 2011), and depression (Mercer-Lynn et al., 2014).

To more precisely articulate the distribution of students' boredom proneness levels, future research opportunities may opt for larger samples. Since a single rural district in the southeastern United States served as the study setting, the generalizability

of the findings to other high schools in different geographic locales is unknown. The sample size in the present investigation, which was 5% of the available population, may also be a limiting factor in current conclusions; students who completed the self-report surveys may have not been fully representative of the entire student population. For instance, those who were less prone to boredom may have more readily opted to participate, or those who were higher in certain character strengths may have been more inclined to participate than others. Also, the current sampling of students within a traditional high school setting only necessitates comparison to boredom proneness levels of students' participating in alternate models of instructional delivery, such as those engaging in online or self-paced curriculum programs. With the increased use of high-end technologies as learning tools in 21st century classrooms (Maris, Maris, Dungan, & Slavici, 2018), educational leaders may also consider and expand former research which has emphasized the relationship between high boredom proneness and internet-use disorder (Lin, Lin, & Wu, 2009; Rahmani & Lavasani, 2011; Wegman et al., 2018). Researchers could thus widen the existing knowledge base by examining differences in boredom proneness levels as a function of response to delivery method or setting, both within and across districts and regions.

Findings of significant differences in boredom proneness levels based on a top character strength have implications for the future; there may be discernable patterns to assist educational leaders with the development of novel, strength-based instructional approaches to address the prevalent condition of academic boredom in students. Examining participants' top character strength yielded information that suggests a connection between boredom proneness and four character strengths; elevated humility

was associated with elevated boredom proneness when compared to students with the number one ranking of the strength of bravery, prudence, or curiosity. Appreciation of the observable behaviors associated with each character strength can aid educators in distinguishing which students from among the general population may be most susceptible to academic boredom. Definitions of these specific character strengths, as set forth by Park and Peterson (2006), offer educators and counselors clinical insights that viewed collectively, suggest features that may be recognizable in students.

According to VIA classification (Park & Peterson, 2006), individuals who scored high in humility had good self-esteem and a positive self-view along with accurate recognition of limitations. Those with the top strength of humility were content without being the center of attention or getting praise for accomplishments and were likely to demonstrate higher levels of gratitude, forgiveness, spirituality and general health (Park & Peterson, 2006). The strength of humility is within the virtue of temperance and contrasts with features of students for whom bravery, within the virtue of courage, ranked highest. High scores in bravery have linked to facing challenges, threats, or difficulties and taking both risk and action (Park & Peterson, 2006). In comparison to those with humility as a top-ranked strength, those high in prudence also were in the virtue of temperance; they stop and consider the long-term consequences before acting. Highly prudent people maintain self-control and are cautious and practical. Benefits of prudence have been associated with productivity, job performance, and student achievement (Park & Peterson, 2006). Those who rank highest in curiosity are apt to explore, discover, and take an interest in ongoing experience for its own sake. Curious people have a natural desire to acquire information, build personal knowledge, and aim goals toward self-

improvement (Park & Peterson, 2006). Compared with students who are brave, prudent, or curious, those students who are humble are significantly more likely to be more prone to boredom. Future research requires answering why humble students are more prone to boredom than others. In addition to the self-report survey of character strengths, structured interviews, which were beyond the scope of the present study, may also provide substantiating qualitative data to shed light on the relationship between high humility and high boredom proneness.

The current indication that those with the strength of humility possess elevated levels of boredom proneness contrasts extant literature (Culp, 2006; Hunter et al., 2016), and thus researchers and educational leaders would benefit from the additional examination of the specific relationship between humility and boredom proneness. Investigation of the signature strength profile of students, which incorporates their top five character strengths as opposed to analyzing solely their top strength, may highlight relationships not detected with the present data. The challenge to investigators in analyzing the participants' complete signature strength profile is that these variables are nominal and ranked and cannot combine into a composite scale score.

Additionally, since optimal use of character strengths has been associated with desirable outcomes, it is plausible and therefore worth investigating whether academic boredom is associated with underuse of specific character strengths (Freidlin, Littman-Ovadia, & Niemiec, 2017). Seligman (2015) presented the pathologies of character strengths as syndromes model and described the absence, opposite, and excess of each character strength. Accordingly, the opposite of the strength of humility is arrogance and the opposite of curiosity is boredom (Seligman, 2015). In their strengths as moderators

model, Hill-Simmonds et al. (2019) integrated clinical diagnosis with the strengths-based model introduced by Peterson and Seligman (2004). They concluded that character strengths can moderate the way in which mental disorders develop and manifest within the individual (Hill-Simmonds et al., 2019). While academic boredom proneness is not a mental disorder, it is a negative emotion and thus by extension implies that the use of positive psychology principles of character strengths to moderate the experience of academic boredom is a viable approach, which future research could corroborate.

Researchers have confirmed that negative emotions are negatively related to motivational aspects at school (Mega et al., 2014; Pekrun et al., 2002), and negative affect is negatively related to interest (Pekrun et al., 2002). Both positive feelings and negative feelings are related to students' academic achievement (Lewis et al., 2009; Mega et al., 2014), and even short-term increases in positive emotions mediate the relationship between positive activities and wellbeing (Lyubomirksy & Layous, 2013).
School-related positive affect is a crucial source of students' positive school functioning, and can lead to higher overall school achievement (Weber & Ruch, 2016). Since character strengths are factors that contribute to individuals' positive, proactive, and morally valued feelings, thoughts, and actions (Peterson & Seligman, 2004), confirming that students can capitalize on the positivity inherent within their character strengths, to reduce negative feelings like academic boredom is a reasonable goal for future research.

Current conclusions confirmed the relationship between academic boredom proneness and character strengths, and ongoing investigation can continue to define the nature of the interaction. At this point, there is no evidence available concerning the extent to which students could benefit from addressing academic boredom with strength

use, as a means of alleviating specific symptoms; however, Park and Peterson (2009) suggested that practitioners could use a strengths-based approach with people at any level and of any ability, including intervening with students having a history of disability or poor achievement, as a strength-based approach may foster rapport and increase student motivation. According to Quinlan et al. (2011), the rationale for strength-based interventions is that use of one's strengths is engaging and fulfilling; therefore, it is a worthwhile aim of future research to examine whether the development of an individual's top strengths leads to enhanced wellbeing and subsequent increased engagement and achievement.

Positive psychology and related character strength-building activities have gained momentum since the beginning of the 21st century, leading to a shift toward exploring individual qualities (Seligman, 2002). Current research indicated that there are differences in students' academic boredom propensity as a function of their top character strength. Future research opportunities could entail checking for differences in students' boredom proneness before and after participation in a strength-based intervention, to confirm both the nature of the relationship and the efficacy of incorporating character strength-based strategies to mitigate academic boredom.

Overarching challenges that remain for future educational researchers are to more precisely illustrate the predictive qualities of both boredom and character strengths, which may have been under-appreciated in present conclusions by the limitations of using of self-reported GPA, interval reporting ranges, and participants' top character strength. The present researcher assumed that participants knew and reported their GPA accurately; however, participants may have inflated or otherwise misrepresented their

self-reported scores. Additionally, the present study allowed participants to report their GPA using five interval ranges as opposed to reporting precise GPA scores. Lounsbury et al. (2009) used seven self-reported interval ranges to confirm the relationship between character strengths and self-reported GPA in university students, suggesting that present data may not have been sensitive enough to statistically expose predictive qualities. Future educational leaders would benefit from consideration of whether boredom proneness or character strengths can predict student achievement using actual GPA from student records or alternative measures such as scores on standardized tests required for high school graduation, or ACT scores required for college admission. Vodanovich (1999) showed that boredom prone students scored lower on career planning than their non-bored peers, and thus researchers could alternatively compare boredom proneness scores with career planning measures as well. Additionally, researchers could compare boredom proneness scores with course grades in academic and career pathway classes, as prior research has confirmed that student boredom was higher in core subject areas than other classes (Macklem, 2015).

The current investigation confirmed that academic boredom remains a significant problem for today's youth; most high school students are at least moderately prone to boredom and as many as one-third are highly prone to boredom. Proneness to academic boredom is a critical concern for most high school students, regardless of their gender, grade level, or disability classification. Students who possess a top character strength of humility are more likely to be highly boredom prone than peers who have top strengths of bravery, prudence, or curiosity. The ability of boredom proneness or character strength measures to predict students' academic success was currently disconfirmed.

Future research can add to the existing body of knowledge about academic boredom and character strengths by considering key implications from the current study. First, an ongoing investigation should examine individual differences in boredom proneness by delivery method and region and should include corroborative data from teachers and parents along with student self-report of boredom proneness. Second, researchers should endeavor to quantify character strengths, to be able to analyze students' composite signature strength profile rather than solely students' top strength. Also, as there were significant findings related to the character strength of humility, future studies should incorporate an instrument to precisely measure humility and compare it with boredom proneness scores. It would likewise be prudent for future research to include qualitative data from structured interviews to enhance current understanding of the connection between the character strength of humility and high boredom proneness. Third, measuring boredom proneness before and after the provision of character strengths interventions would substantiate existing conclusions about the effectiveness of strength-based interventions to mitigate negative emotions. Finally, investigators should consider defining academic achievement in alternate ways to more clearly establish the ability of boredom proneness and character strengths to predict student success.

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Appendix A

Approval from School District

On Wed, Jan 23, 2019 at 9:52 AM JM

Bonnie,

Your project is approved.

Your topic is interesting; I have not seen work on this, and I'll be interested to see your results. Please do have Mr. XXX approve your survey questions prior to administering them to students. Thanks for patience in this process, and best of luck with your project!

JM

Appendix B

Principal Meeting for Approval to Conduct Dissertation Project

Statement of the Problem

Academic boredom is a universal emotion experienced by students in various educational contexts, across age groups, ethnicity, and educational needs and disabilities. Academic boredom is among the most frequently experienced affective states occurring in the classroom. According to updated conclusions from recent meta-analysis (Hattie, 2012; Visible Learning Plus, 2018), boredom ranked as the third most detrimental influences affecting student achievement. Boredom is linked to higher absenteeism and dropout, and lower grades.

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Research Questions

1. Based on data from the SBPS and the VIA Youth-96, what is the relationship, if any, between boredom proneness levels and signature strengths profiles for students in grades 9-12 from two high schools in a rural southeastern school district?

2. Based on data from the SBPS and the VIA Youth-96, how, if at all, do scores from students in grades 9-12 from two high schools in a rural southeastern school district vary by, grade level, gender, ethnicity, and educational disability classification?

3. Based on data from the SBPS and the VIA Youth-96, to what extent do boredom proneness levels and signature character strengths profiles predict cumulative GPA for students in grades 9-12 from two high schools in a rural southeastern school district?

Participant Security

Parental Consent
Response Anonymity
Safe Data Storage

Instrumentation

Short Boredom Proneness Scale (SBPS) (Struk, Carriere, Cheyne, & Dankert, 2017)
VIA Youth-96 (Park & Peterson, 2006)

Methodology

Quantitative, Non-Experimental
Simple Random Sampling, Surveys
Correlation and Regression, (2) 3-way ANOVAs

Implementation

Online surveys

Appendix C

Short Boredom Proneness Scale

1. I often find myself at “loose ends,” not knowing what to do.
2. I find it hard to entertain myself.
3. Many things I have to do are repetitive and monotonous.
4. It takes more stimulation to get me going than most people.
5. I don’t feel motivated by most things that I do.
6. In most situations, it is hard for me to find something to do or see to keep me interested.
7. Much of the time, I just sit around doing nothing.
8. Unless I am doing something exciting, even dangerous, I feel half-dead and dull.

Struk, A. A., A., J. S., Allan Cheyne, J., & Danckert, J. (2017). A Short Boredom Proneness Scale: Development and Psychometric Properties. *Assessment*, *24*(3), 346–359.

Appendix D

VIA Youth-96 Survey

1 There is someone who will listen to me when I have problem.

2 I think that life is very exciting.

3 Everyone's opinion is equally important to me.

4 I am not a show-off.

5 I am less honest if it will keep me out of trouble.

6 I am viewed as the leader when I'm playing with others.

7 I often stay mad at people even when they apologize.

8 When others tell me about their problems, I become very concerned.

9 I am usually full of energy.

10 I feel better when I see beautiful pictures or listen to great music.

11 I expect good things to come my way.

12 I am always interested in discovering more.

13 I get excited when I see there is something new to learn.

14 If there is a chance to learn something new, I jump right in.

15 I am certain I can get through bad times.

16 I am able to steer clear of trouble with others.

17 I often don't feel thankful.

18 I do the right things even if others tease me for it.

19 I enjoy creating things that are new and different.

20 I have a faith that I practice.

21 I review the positives and negatives of every option when I am making a decision.

22 I am a very loyal member of my group/team.

23 Even when things look bad, I say hopeful.

24 I review the consequences of my behavior before I take action.

25 I have a lot of enthusiasm.

26 I have a lot of patience.

27 I carefully weight the opinions of others before I make up my mind.

28 I feel better when I pray.

29 I get along with a variety of people.

30 My temper often gets the best of me.

31 I don't boast about what I achieve.

32 I am energized by learning new things.

33 I do kind things for people on my own without being told.

34 I often figure out different ways of doing things.

35 I complete all of my homework even when many challenges arise.

36 I respect the opinions of my teammates, even when I disagree.

37 I consider every option before I make a final decision.

38 I am honest even when lying could keep me from getting in trouble.

39 I am viewed as someone who gets things done.

40 Making people laugh is something I am good at.

41 I treat everyone fairly even if I don't like them.

42 I often find myself doing things that I know I shouldn't be doing.

43 I feel loved.

44 When I really want to do something right now, I am able to wait.

45 I forgive people if they say they are sorry for hurting me.

46 I love learning about how to do different things.

47 People tell me that I am a wise person.

48 I let other kids talk about themselves rather than focusing attention on me.

49 I am a forgiving person.

50 When someone is being treated unfairly, I stick up for them.

51 I believe there is a Higher Power that points me to do the right thing.

52 I love exploring new and different things.

53 I speak up when I see someone being mean to others.

54 I listen carefully to other group members when our team is making a decision.

55 People look up to me as their leader and they give me their trust.

56 When I learn about people who are suffering (e.g., those who are poor or sick), I worry about them.

57 People say that I am funny.

58 I don't give less than 100% when I am working on something.

59 I frequently have creative ideas.

60 I can easily bring smiles to people's faces.

61 I see myself as a hard worker.

62 I am good at leading a group to get the job done.

63 My friends get my opinion before they make important decisions.

64 I frequently ask questions.

65 When someone apologizes, I give them a second chance.

66 I often feel lucky for things in my life.

67 I tell the truth even when it means I won't get what I want.

68 I openly express my feelings to my family and friends.

69 I like going to art exhibits or performances.

70 I often notice beautiful things around me.

71 Others trust me to be truthful.

72 I talk and behave appropriately in most social situations.

73 I see myself as a very creative person.

74 I wait until I have all the facts before I make a decision.

75 I don't come across like I am better than others.

76 I am a thankful person.

77 I am able to control my anger really well.

78 I do whatever I can when I see people who are in need.

79 I am a cheerful person.

80 I stand up for what is right, even when I am scared.

81 Others tell me that I offer good advice to people.

82 I love beautiful things.

83 I am always full of questions.

84 There is a Higher Power looking out for my best interests.

85 I think carefully before I act.

86 I enjoy telling people funny stories and jokes.

87 I treat people fairly even when they are unfriendly.

88 I am very grateful for my family.

89 I am cautious not to do something that I will regret later.

90 I have a positive outlook about the future.

91 Others want me in charge when a group project needs to be done.

92 I am very cooperative when I work in groups.

93 I do not hesitate to tell my family and friends that I love them.

94 Ina group I give everyone an equal chance to be involved.

95 I am able to solve problems in a way that is pleasing to everyone.

96 I often know the right thing to say to make people feel good.

Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence*, *29*, 891-905.

Appendix E

Permission to Use Short Boredom Scale

Greetings Dr. Struk,

I am an ABD Doctoral candidate in Instructional Leadership at Lincoln Memorial University in Tennessee. I am doing my dissertation on boredom and character strengths in adolescents. I would like to administer the SBPS, electronically to local high school students. Can you please advise me as to gaining permission to use this instrument?

Prior to deciding on using this version, I contacted Dr. Farmer and gained his approval to use the original BPS. Also, I contacted Dr. Vodanovich and gained his permission to use the BPS-SR.

May I have your permission to use the SBPS?

Sincerest thanks, and I look forward to your guidance on this most important matter.

Bonnie lannaccone

Andriy Struk to you

Hi Bonnie,

You are welcome to use the short boredom proneness scale in your study. I attached the reference article for this scale. Good luck with your research!

-Andriy

Appendix F

Parent Consent Form

PARENT CONSENT FORM

BOREDOM PRONENESS AND CHARACTER STRENGTHS RELATED TO ACADEMIC ACHIEVEMENT IN ADOLESCENCE

Your high school student can take part in an original investigation of boredom proneness and character strengths, and how they impact school success. A researcher at Lincoln Memorial University will be conducting the project, with permission from Blount County Schools.

PROJECT INFORMATION

- The purpose of this project is to investigate the relationship of boredom proneness and character strengths of personality to academic achievement.
- The student will take (2) online surveys that will take no more than 20 minutes.
- This project is voluntary and there is no penalty for choosing not to participate.
- There are no physical, mental, or emotional risks to participating in the project.
- The student is free to stop answering the questions on the surveys at any time.
- All information will be kept confidential: no teachers or classmates will see it.
- All information that is reported in the research will remain anonymous.
- All information collected is for research purposes only. The data from the character strengths survey may be reused, without identifying information, by the VIA Institute company that owns it.
- **QUESTIONS?** Bonnie.Iannaccone@lmunet.edu (865) 984-8110 ext. 56-2135

Appendix G

Minor Child Consent Form

MINOR CHILD CONSENT FORM

BOREDOM PRONENESS AND CHARACTER STRENGTHS RELATED TO ACADEMIC ACHIEVEMENT IN ADOLESCENCE

You are being asked to be part of an original project that is being conducted by a researcher at Lincoln Memorial University. The project is about the relationship between boredom proneness and character strengths, and how they impact school success. This project is voluntary and there is no penalty for choosing not to participate.

PROJECT INFORMATION

- The purpose of this project is to investigate the relationship of boredom proneness and character strengths of personality to academic achievement.
- After your parent submits the signed parental consent form (which was sent to him/her in an email from the researcher), you will get an email with a participant consent form.
- When you submit your consent to participate in the study, you will be asked to provide information about your gender, grade level, disability classification, and GPA.
- After you provide the required information, you will be given questions to a survey about boredom. The survey should take approximately 5 minutes to complete.
- When you submit your responses to the demographic information and the boredom questions, you will receive a second email from the researcher, with a

URL link to a character strengths survey, which should take approximately 15 minutes to complete.

- Once you start the surveys you are free to stop at any time.
- There are no physical, mental, or emotional risks to taking the surveys.
- The information from this project will be kept confidential: no teachers or classmates will see it.
- All information that is reported in the research will remain anonymous. The data from the character strengths survey may be reused, without identifying information, by the VIA Institute company that owns it.

QUESTIONS?

Bonnie.Iannaccone@lmunet.edu (865) 984-8110 ext. 56-2135

Appendix H

Researcher Terms and Conditions from the VIA Institute

How to Conduct a Study using the VIA Assessments

We aim to provide researchers with barrier free access to state-of-the-art assessments to measure and assess character strengths and their application. All of the assessments and scales have good reliability and accumulating validity, but we continue to develop and refine them. To this end, we invite your collaboration in the investigation of character strengths.

1. Review the full list of VIA Assessments and determine which assessment fits best with your research study
2. Register or Sign in to your VIA Account and set-up a Researcher Site.

Set-up Researcher Site

Please contact research@viacharacter.org with any questions.

ABOUT

Established as non-profit organization in 2001, the VIA Institute on Character is a global leader in the science and practice of character. We are proud to offer the VIA Survey, the only free, online, scientifically validated survey of character strengths.

Research Terms & Conditions

To provide you with access to any of the VIA Assessments, scoring keys and your research data set, you must agree to the following terms and conditions:

- I agree to keep the information strictly confidential and will not distribute it unless I am given written permission from VIA. I will not publish or share the VIA Survey questions or scoring key (including research dissertations).
- I agree to use the information for research purposes only.
- I agree to complete the analyses within three years of the date of this agreement is submitted.
- I agree to allow inclusion of my data, in a non-identifiable form, in the VIA databases.
- I agree that my data may be used for future archival studies at the discretion of the VIA Institute and that some of this research may be used for purposes of developing products relevant to the concept of character.
- I understand that the VIA assessments are provided free of charge, thus I will not charge my research subjects for taking any of the VIA assessments.

- I agree to share my research findings and outcomes with the VIA Institute using the following email addresses: research@viacharacter.org and ryan@viacharacter.org.
- I agree to adhere to regulations for the conduct of ethical research in the geographic region where I am located.
- I agree to use the VIA Surveys in their entireties (unless use of individual subsets is approved and not alter in any way.
- I agree that the approval given herein is only applicable to the current study.
- I understand that data once delivered to the VIA Institute on Character will be incorporated into a database with other records and cannot be withdrawn at a later date.
- I agree to cite the VIA properly, per the citations listed here (https://www.viacharacter.org/www/Research/VIA-Citation)
- I understand and agree to adhere to ALL of the statements above.

Appendix I

VIA Institute Private Policy

Privacy Policy

LAST UPDATED: 7/2/2018

VIA Institute on Character ("VIA," "Corporation," "Company," "we," "our," and "us") knows that you care how information about you is used and safeguarded. We respect your privacy and we are committed to protecting your privacy through our compliance with this Privacy Policy (the "Policy"). This Policy should be read in conjunction with our Terms of Service, into which this Policy is incorporated by reference.

In compiling this Policy, we have taken steps to ensure we have incorporated the standards and principles outlined in data collection and privacy frameworks, including the European Union's General Data Protection Regulation ("GDPR"). This Policy describes:

- The types of information we may collect from you or that you may provide when you visit the website https://www.viacharacter.org/www/ (the "Website") as well as any websites and blogs directly owned by VIA ("our websites")
- Our practices for collecting, using, maintaining, protecting, and disclosing that information.

This Policy does not apply to websites or other domains that are maintained or operated by third parties or our affiliates. Our websites may link to third party websites and services, but these links are not endorsements of these sites and this Policy does not extend to them. Because this Policy is not enforced on these third party websites, we encourage you to read any posted privacy policy of the third party website before using the service or site and providing any Personal Information. Personal Information is any information that can be used to individually identify you from a larger group, and can include details such as your name, email address, age, and address.

Please read this Policy carefully to understand our policies and practices regarding your information and how we will treat it. If you do not agree with our policies and practices, then please do not use our websites. By using our websites, you agree to

the terms of this Policy. This Policy may change from time to time (see below, "Changes to this Policy"). Your continued use of our websites after we make changes is deemed to be acceptance of those changes, so please check the Policy periodically for updates.

Your responses to questionnaires on the Website are entirely voluntary and will be used, anonymously, in ongoing research by VIA, the creators of the questionnaires, and other researchers with VIA's permission. By visiting the Website and completing the questionnaires, you are accepting and consenting to the practices described in this Policy.

What We Collect and How We Collect It

To ensure that we provide you with the best possible experience, we will store, use, and share information about you in accordance with this Policy. For example, when you request information, subscribe to our emails, complete a survey, or register yourself with the Website, we will ask you to provide Personal Information to complete these transactions.

You are not required to give us your real email address or name, but providing your real email address and name will help us assist you with your account. If we receive a request for information about your account, the response will be sent to the registered address, not the one making the request, unless we can verify that the registered address is an invalid or defective address and that the person making the request is the person who created the account.

Some of the questions presented in our surveys and questionnaires will ask for potentially sensitive information relating to your political opinions, or religious, spiritual, and philosophical beliefs. By answering these questions, you consent to the processing of that personal data for the purpose of providing results about your character strengths.

You are not required to provide us with any of this data, but if you choose to submit the registration form or any of the questionnaires, you must answer all of the questions to receive your scores.

Automatic Information Collection

In addition to the information that you provide us through registration, questionnaires, or elsewhere, we may also collect information about you during your visit to our Website or while you engage with one of our marketing campaigns. We collect this information using automated tools that are detailed below. These tools may collect information about your behavior and your computer system: information like your internet address (IP address), the pages you have viewed, the type of browser you used, and the actions you have taken while on our websites. This helps us understand usage of the website and allows us to produce aggregate statistics on usage.

We may also use these tools in connection with our email marketing campaigns to allow us to understand what links you click on and what content is of interest to you. VIA may also collect information from commercial sources to enrich and verify the information that you have provided or that we have collected about you. This information will help us to ensure that we have accurate records, and will provide us with the ability to keep your information up to date. In some cases, we may use this commercial information to determine something about you. For example, we may use your IP address to calculate your approximate geographic location. Some of the tools we use to automatically collect information about you, include:

a. Cookies. A "cookie" is a small data file transmitted from a website to your computer's hard drive. VIA may use cookies on our websites to provide you with services and features. For example, we use cookies to make sure that you, and only you, are able to view your scores from our questionnaires, and will never contain any Personal Information about you. In some cases, we may also use cookies to monitor your interaction with our advertising campaigns. These cookies will be delivered by a third party website, but will provide us with information when you visit our Website. One such trusted third party partner is Google Analytics. The Website sends aggregated, non-Personal Information to Google Analytics for the purpose of providing VIA with the ability to conduct technical and statistical analysis on the Website's performance. For more information on how Google Analytics supports the Website and uses information sent from the

Website, please review Google's privacy policy available athttps://policies.google.com/technologies/partner-sites. VIA uses session cookies, which do not stay on your computer after you close your browser or log off the site. Most browsers automatically accept cookies by default, but you can usually refuse cookies or selectively accept cookies by adjusting the preferences in your browser. Please be aware that a number of features on our websites may require cookies to operate correctly, turning off cookies may affect your experience on our Website.

b. Embedded Web Links. Links provided in our emails and in some cases on third party websites may include tracking embedded in the link. The tracking is accomplished through a redirection system. The redirection system allows VIA to understand how the link is being used.

c. Web Beacons. A Web Beacon is an electronic image. Web Beacons can track certain things from your computer and can report activity back to a web server allowing us to understand some of your behavior. If you choose to receive emails from VIA, we may use Web Beacons to track your reaction to our emails. We may also use them to track if you click on the links and at what time and date you do so. Some of our marketing partners may use Web Beacons to track your interaction with online advertising banners.

d. Do Not Track Disclosure. We do not track website visitors over time and across third party websites to provide targeted advertising. Therefore, our Website does not operate any differently when it receives Do Not Track (DNT) signals. The information we collect automatically is statistical data and does not include personal data.

How We Use Your Information

The information we gather and you provide is collected and used to complete the services you have requested. We may also use this information to improve our service to you and your experience when engaging with our websites and our services.

Registration

During registration, we ask you to tell us about yourself, including the month/year of your date of birth and your sex. We also ask you, during registration, to give us your email address, and a name that you would like to use. These are for your benefit. They make it easier for you to remember how to log in to the Website. They make it possible for us to provide you with your password if you forget it. And they help you be sure that you are looking at your own records if you share your computer with another user of this site. We display your name when you log in and include it in your printable report. If you do not want to share your real name, you can make up a name.

After completing a questionnaire we ask optional demographic questions, such as your zip code (or your country, if you live outside the U.S.), how much formal education you have received, and your occupation. We use this information to tell you how your scores on the questionnaires compare to others who are like you in age, gender, geographic location, education, and occupation. We also use them to compute statistics for our research on how these factors affect happiness and strengths. These are completely optional.

Provided you have consented, we may also use your email address and name to send you email messages with information on how to utilize your strengths and links to resources.

Questionnaires

We collect your responses to the questionnaires on this site and store these, along with your scores, on our database server. We will never report your individual responses or scores to others, except as described below. We will include your scores and responses in reports, publications, lectures, and websites only in summaries of groups of site users. We will not include your responses in the comparisons we provide on this site until there are at least 50 surveys from people in the same category (a geographic area, age range, occupational group, etc.).

User Experience

We may also use your information for the following purposes:

- Prevent malicious activity and provide you with a secure experience;
- Provide service and support for your use of the Website;
- Provide marketing communications that are effective and optimized for you;
- Keep you up-to-date with the latest benefits available from VIA;
- Avoid sending you something that will not be of interest;
- Define what content you might be interested in;
- Personalize your Website experience;
- Measure performance of marketing programs;
- Learn about your behavior and try to improve what we do for your benefit;
- Contact you about services that are relevant to you; and
- Display testimonials, reviews, or recommendations on our websites with the express consent of the owner of that statement.

Although we use your name and email address to inform you about future products and services, you can always unsubscribe from receiving any marketing emails via the unsubscribe option in any such marketing email you receive from us.

How We Share Your Information

VIA does not sell or lease your information to any third party. We may disclose your Personal Information to our partners in accordance with this Policy. We may share your information depending upon your use of our services.

- General Users Completing a VIA Survey. Many website visitors participate in our questionnaires to learn more about his or her character strengths. After completing the survey and entering optional Personal Information, you will go to your results. You may receive a notification allowing you to opt-in to a research study. If you have not opted-in to participate in a study but have completed the survey on the Website at some point, we may share de-identified results without your name or email address to

a Researcher, as defined below, who has contacted us to get a sample of data with specific guidelines that you fit (for example, you are between the ages of 21 and 40 and are within the United States). If you register and complete a survey using a consultant's unique professional link, your information (name, email address and survey results/responses) will be shared with that professional. Your registration through the professional link will serve as permission to do so.

- Researchers. Researchers are users who wish to use VIA's surveys and questionnaires in their own research studies. To the extent that you provide us with data and results pertaining to your own research studies, we will not share any of that information with anyone without your explicit consent.
- Research Participant. If you choose to take a survey as part of a research study, then you will take it through a unique Researcher Site link that is given to you by the Researcher. Alternatively, you may take the survey through the Website and enter a research code that was given to you by the Researcher. As a Research Participant, you will take the survey and you will be asked to give your consent to have your information and your survey responses and results shared with the Researcher. Upon providing your consent, VIA will provide the Researcher with all of the information that you entered when registering and taking the survey. This may include your name, email address, gender, data of birth, and any optional demographic information that you choose to enter.

Your Choices and Selecting Your Privacy Preferences

VIA wants to provide you with relevant information that you have requested.

If we provide subscription-based services, such as email newsletters, we will allow you to make choices about what information you provide at the point of information collection or at any time after you have received a communication from us while you are subscribed to the service. This assumes that any transactional or service-oriented messages are excluded from your preference, as they are not intended to be for the purposes of marketing communications, and rather to fulfill a service you have requested.

Email newsletters and marketing emails will not be sent to you unless you consent to receive such marketing information. After you request to receive these emails, you may opt-out of them at any time by selecting the "unsubscribe" link at the bottom of each email. Please note that by opting-out or unsubscribing you may affect other services which you have requested we provide to you where email communication is a requirement of the service provided.

The communication that you receive from VIA will be in accordance with your preferences and this Policy. Some of the communications you receive could include automatic information collection tools.

Access to and Accuracy of Your Information

VIA strives to maintain and process your information accurately. We have processes in place to maintain all of your information in accordance with relevant frameworks and take steps to monitor its accuracy. We employ technologies designed to help us maintain information accuracy on input and processing.

Where we enable you access to your Personal Information, we will always ask you for a username and password to help protect your privacy and security. We recommend that you keep your password safe, that you change it periodically, and that you do not disclose it to any other person or allow any other person to use it.

To view and change the Personal Information that you have directly provided to VIA you can return to the webpage where you originally submitted your information and follow the instructions on that webpage or contact us directly for assistance. In some cases, depending upon the type of questionnaire or research study you have participated in, we may be unable to change the Personal Information you provided due to the research study having concluded. In these cases, we will make every effort to inform the facilitator of the study of your desire to change Personal Information you provided.

Children's Information and Privacy

VIA does not market its services to children under the age of thirteen (13). We do market the survey and reports to teachers and parents who could use it with children

under the age of thirteen. No one under the age of thirteen may create an account on the Website. For Website visitors in the European Union, no one under the age of sixteen may create an account on the Website. We include one questionnaire that is suitable for children between the ages of ten (10) and seventeen (17). It assesses a child's character strengths and provides the results in a rank order list. Those who are under the age of thirteen may only complete the assessment under the account of a parent, guardian, or other adult authorized by a parent or guardian. For Website visitors in the European Union, those who are under the age of sixteen (16) may only complete the assessment under the account of a parent, guardian, or other adult authorized by a parent or guardian. We present sample questions before beginning the survey to help parents decide if it is appropriate for their child.

After you log on, we ask you to enter a first and last screen name for the child, month and year of birth, and gender. The screen name given for the child is used only to properly distinguish the different children's scores on your account. You do not have to use the child's real name. We do not ask for the child's address, geographic location, email address, or other information that could be used to identify or locate a child, except through you.

For Website Visitors in the European Union ("EU")

Under the GDPR, our visitors in the EU are provided additional rights concerning their Personal Information, or "personal data" as defined under the GDPR. For the purposes of this Policy and any personal data processed for Website visitors or individuals in the EU, VIA operates as a data controller unless otherwise determined by agreement or law. Any personal data we collect from you is processed in the United States and under the terms of this Policy, and in the legitimate interest of our business and providing our services to you as the lawful means for such processing. You may always withdraw your consent to our use of your personal data, as described below. We will only retain your personal data for the time necessary to provide you the information and marketing services to which you have consented, and in accordance with your rights below and in this Policy.

You can exercise any of the following rights by notifying us as described below:

- Access: You may email us at kellya@viacharacter.org to request a copy of the personal data our Website currently contains.
- Correction or Rectification: You can correct what personal data our Website currently contains by signing in to your account and clicking the Account Settings tab or emailing us at kellya@viacharacter.org to request that we correct or rectify any personal data that you have provided to us. We may not accommodate a request to change information if we believe the change would violate any law or legal requirement or cause information to be incorrect.
- Restrict Processing: When applicable, you may restrict the processing of your personal data by submitting a request via email tokellya@viacharacter.org. In your email, please explain how you wish VIA to restrict processing of your personal data. When such restrictions are not possible, VIA will advise you accordingly. You can then choose to exercise any other rights under this Policy, to include withdrawing your consent to the processing of your personal data.
- Object to Processing: When applicable, you have the right to object to the processing of your personal data by submitting a request via email to kellya@viacharacter.org. When such objections are not possible, VIA will advise you accordingly. You can then choose to exercise any other rights under this Policy, to include withdrawing your consent to the processing of your personal data.
- Portability: Upon request and when possible, VIA can provide you with copies of your personal data. You may submit a request via email tokellya@viacharacter.org. When such a request cannot be honored, VIA will advise you accordingly. You can then choose to exercise any other rights under this Policy, to include withdrawing your consent. Where applicable, VIA will ensure such changes are shared with any trusted third parties.
- Withdraw Consent: At any time, you may withdraw your consent to VIA's processing of your personal data through this Website by notifying us via email at kellya@viacharacter.org. Using the same email address associated with your Website account, simply type the words "WITHDRAW CONSENT" in the subject

line of your email. Upon receipt of such a withdrawal of consent, VIA will confirm receipt and proceed to stop processing your personal data. Where applicable, VIA will ensure such changes are shared with trusted third parties.

- Erasure: If you should wish to cease use of our Website and have your personal data deleted from our Website, then you may submit a request by emailing us at kellya@viacharacter.org. Upon receipt of such a request for erasure, VIA will confirm receipt and will confirm once your personal data has been deleted.
- Submit Complaints or Questions: If you wish to raise a complaint on how we have handled your personal data, you can contact us as described below. If you reside in a European Union member state, you may also lodge a complaint with the supervisory authority in your country.

Safeguarding the Data We Collect

We take reasonable technical, administrative, and physical precautions to keep both your Personal Information and non-Personal Information secure against accidental loss and from unauthorized access, use, alteration, and disclosure. You may utilize a username and password to enjoy our websites. It is your responsibility to keep confidential your username and password.

Changes to this Policy

If we make any changes to this Policy, they will be posted on this page. You can get to this page from any of our websites by clicking on the Privacy Policy link (usually at the bottom of the screen). We will always date these changes so you know if you are looking at a changed version.

How to Contact Us

We value your opinions and welcome your feedback. To contact us about this Policy or your Personal Information, please contact us at:kellya@viacharacter.org

ABOUT

Established as non-profit organization in 2001, the VIA Institute on Character is a global leader in the science and practice of character. We are proud to offer the VIA Survey, the only free, online, scientifically validated survey of character strengths.
Contact Us